

ELEMENT – Survey of Reading and Mathematics Comprehension – Developments in Grades 4 to 6 in Berlin

Handbook of Scales

**Forschungsdatenzentrum (FDZ) am Institut zur
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Table of Contents

EXPLANATORY NOTES ON THE ELEMENT HANDBOOK OF SCALES	8
PART I SUBJECT PERFORMANCE	11
1 TRACKING VARIABLES	12
Imputation.....	12
1.1 Identification Variables	12
Student ID (FDZ).....	12
Student ID (Original).....	12
School ID (IQB-FDZ New)	13
Class ID (IQB-FDZ New).....	13
School District ID	14
1.2 Information on Participation	15
Participation Status	15
Test Status.....	16
Test Status: English Test.....	16
Person Completing Questionnaire: Parent Questionnaire.....	17
1.3 Weighting and Standard Error Estimation	17
Population Weights.....	17
Subject-Specific Weights.....	18
Weighting by Grammar School Quota from Grade 7	18
Senate Weight: District Comparison - Primary School Students.....	18
House Weight: Subject-Specific	18
Jackknife Repeated Replication: Jackknife Sampling Zone	19
Jackknife Repeated Replication: Jackknife Replicate.....	19
2 GERMAN.....	20
2.1 Reading Comprehension.....	20
2.1.1 <i>Performance Scale</i>	20
Performance Scale: Reading Comprehension (ELEMENT-KESS Scale)	20
2.1.2 <i>Difficulty Level</i>	23
Achieved Difficulty Level: Reading Comprehension	23
2.1.3 <i>Anchors</i>	24
Performance Scale: Anchoring Reading Comprehension to LAU (Aspects of Learning Background and Learning Development) (LAU-5 and LAU-7 Scale)	24
Performance Scale: Anchoring Reading Comprehension to IGLU/PIRLS (IGLU Scale)	25
2.2 Spelling	26
2.2.1 <i>Performance Scale</i>	26
Performance Scale: Spelling	26
3 MATHEMATICS	27
3.1 Performance Scale.....	27
Performance Scale: Mathematics.....	27

3.2	Difficulty Level	29
	Achieved Difficulty Level: Mathematics.....	29
3.3	Anchors	30
	Performance Scale: Anchoring Mathematics to LAU (LAU-5and LAU-7 Scale).....	30
	Performance Scale: Anchoring Mathematics to IGLU (IGLU Scale).....	31
4	ENGLISH.....	32
4.1	Performance Scale.....	32
	Performance Scale: English	32
4.2	Anchors	33
	Performance Scale: Anchoring English to LAU7 (LAU-7 Scale)	33
5	GENERAL SUBJECT PERFORMANCE.....	34
5.1	Index	34
	Performance Scale: General Subject Performance Index.....	34
5.2	z-Transformations	35
	Performance Scale: Reading Comprehension z-Transformation.....	35
	Performance Scale: Mathematics z-Transformation.....	36
6	BASIC COGNITIVE ABILITIES	37
	Cognitive Abilities Test	37
PART II: FACTORS OF SITUATIONAL CONTEXT.....		38
1	INDIVIDUAL STUDENT DATA	39
1.1	Personal Characteristics	39
<i>1.1.1</i>	<i>Gender</i>	<i>39</i>
	Gender	39
	Gender (Student Statements)	40
<i>1.1.2</i>	<i>Age.....</i>	<i>41</i>
	Age	41
	Month of Birth	42
	Month of Birth (Student Statements).....	42
	Year of Birth.....	43
	Year of Birth (Student Statements).....	44
1.2	Test Motivation.....	45
	Test Motivation: Student Questionnaire	45
1.3	Educational Background and Status in the School System.....	47
	Current Type of School: Primary School or 10-Plus Grammar School.....	47
	Grammar School: 8 or 9 Years Duration	47
	Number of Changes of School.....	48
	Days Absent in the Full School Year.....	49
	Foreign Language from Grade 3	50
<i>1.3.1</i>	<i>Repetition of One or More Grades.....</i>	<i>50</i>
	Repetition: 1st Grade	50
	Repetition: Grade 2.....	51

Repetition: Grade 3	51
Repetition: Grade 4	52
Repetition: Grade 5	52
Repetition: General	53
1.3.2 <i>Skipping One or More Grades</i>	53
Skipping: Grade 1	53
Skipping: Grade 2	54
Skipping: Grade 3	54
Skipping: Grade 4	55
1.3.3 <i>Pre-School Experience</i>	56
Kindergarten/Nursery School Attendance (Parent Statements)	56
Duration of Kindergarten Attendance (Parent Statements)	57
Start of Schooling	57
Start of Schooling: Year	58
Start of Schooling: School	59
Student Knowledge of German on Starting School (Parent Statements)	61
1.3.4 <i>Report Grades</i>	63
Report Grade – 2nd Half-Term: German Overall	63
Report Grade – 2nd Half-Term: German Oral	63
Report Grade – 2nd Half-Term: German Spelling	64
Report Grade – 2nd Half-Term: German Text Writing	64
Report Grade – 2nd Half-Term: German Reading	65
Report Grade – 2nd Half-Term: Mathematics	65
Report Grade – 2nd Half-Term: Art classes	66
Report Grade – 2nd Half-Term: Biology	66
Report Grade – 2nd Half-Term: Musical education	66
Report Grade – 2nd Half-Term: Physical Education	67
Report Grade – 2nd Half-Term: Social Studies	67
Report Grade – 2nd Half-Term: Geography	67
Report Grade – 2nd Half-Term: History	68
Report Grade – 2nd Half-Term: 1st Foreign Language	68
Report Grade – 2nd Half-Term: 2nd Foreign Language	69
Report Grade – 2nd Half-Term: Mean Grade	69
1.3.5 <i>Educational Aspirations</i>	70
Intended School-Leaving Qualification (Parent Statements)	70
Attempted Enrolment at 10-Plus Grammar School (Parent Statements)	70
Type of School from Grade 7 (Parent Statements)	71
Type of School from Grade 7: Grammar School (Parent Statements)	72
Type of School from Grade 7 (Primary School Recommendation)	73
Type of School from Grade 7: Grammar School (Primary School Recommendation)	73
1.4 <i>Motivational Attitudes Related to School and Teaching</i>	74
1.4.1 <i>School Climate</i>	74
School Satisfaction	74
Classroom Cohesion	77
Performance-based school anxiety	79
1.4.2 <i>Self-Concept</i>	81
Social Self-Concept	81
Subject-Related Ability Self-Concept: Mathematics	83
Subject-Related Ability Self-Concept: German	85
Subject-Related Ability Self-Concept: Reading (Single-Item Variables)	87
Expectations of Self-Efficacy	88
Rating of Personal Ability	91
Interdisciplinary Competency Acquisition at School	93
1.4.3 <i>Motivation to Learning and Achievement</i>	95
Motives for Achievement	95
Motives for Reading	96
External Causal Attribution: Mathematics	97
Internal Causal Attribution: Mathematics	98
External Causal Attribution: German	99

Internal Causal Attribution: German	101
1.4.4 Interests	103
Interest in Reading	103
Subject Interest: Mathematics	105
 2 FAMILY	 107
2.1 Socio-Economic Status	107
2.1.1 Occupation of Parents	107
Employment Status	107
Occupation: Full Details	107
Occupation: Categories	108
Occupation: Not in Employment	109
Occupational Prestige and Socio-Economic Status	110
2.1.2 Relative Prosperity of the Family	111
Availability of Educational Resources	111
 2.2 Cultural Capital	 113
2.2.1 Cultural Practice in the Family	113
Parents' Reading Motivation	113
Attitudes of Parents to Reading (Student Statements)	114
2.2.1.1 Book Ownership	115
Total amount of books in general (Student Statements)	115
Possession of German-Language Books (Parent Statements)	116
Possession of Books in Other Languages (Parent Statements)	117
Possession of German-Language Children's Books (Parent Statements)	118
Possession of Children's Books in Other Languages (Parent Statements)	119
2.2.2 Ethnic Background	120
2.2.2.1 Origin 120	
Student Country of Birth: Germany (Parent Statements)	120
Student Country of Birth: Not Germany (Parent Statements)	121
Student Country of Birth: German Land or Nationality	122
Student Country of Birth: Germany	123
Student Country of Birth: Germany (Student Statements)	124
Age of Students on Arrival in Germany	124
Parents' Country of Birth	125
Parents' Country of Birth: Germany (Parent Statements)	126
Parents' Country of Birth: Germany – Summary (Parent Statements)	127
Parents' Country of Birth: Germany (Student Statements)	127
Grandparents' (Mother) Country of Birth: Germany	128
Grandparents' (Father) Country of Birth: Germany	128
Nationality of Students	129
Student Nationality: German	130
Student Migration Status	130
Migration Status of Parents	131
Student Migration Background	131
Student Migration Background: Summary	132
Student Migration Background: Dummy Variables	132
2.2.2.2 Language	133
Language of Communication at Home	133
Parents' Language of Communication	134
Parents' Language with Students	135
Students' First Language Learnt in the Family (Parent Statements)	136
Student Native Language (Parent Statements)	137
Student Native Language: German (Parent Statements)	138
Language in the Family: German	139
Frequency of German-Language Usage	140
Non-German Language Skills	141
2.2.3 Parents' School Education and Professional Training	142

2.2.3.1	Parents' School Education	142
	School Education of Father.....	142
	School Education of Father: Germany.....	143
	School Education of Mother	143
	School Education of Mother: Germany	144
	Parents' School Education: Dummy Variables	144
	Parents' Highest School Education	145
	Parents' Highest School Education: Summary.....	146
2.2.3.2	Parents' Professional Training	147
	Professional Training of Father	147
	Highest Professional Training of Father	148
	Professional Training of Mother	149
	Highest Professional Training of Mother.....	150
	Parents' highest professional training.....	151
2.3	Social Capital	152
2.3.1	<i>Structure and Size of the Family</i>	<i>152</i>
	<i>Size of the Family.....</i>	<i>152</i>
	Number of Children.....	153
	Family Members Living in Household.....	154
2.3.2	<i>Parents' Attitudes to Parenting Practices and Parental Support.....</i>	<i>155</i>
2.3.2.1	School-Related Attitudes to Parenting Practices and Parental Support.....	155
	Influence on School-Related Free-Time Behaviour (Student Statements)	155
	School-Related Parent-Child Relationship (Student Statements)	156
	Supervision of Homework (Student Statements).....	156
	Conversations about School (Student Statements).....	157
	Parents' Visits to School in School Year	158
	Attitude to Supporting Role of School.....	158
	Support from the Mother.....	159
	Support from the Father	160
	Rating of of Performance Level Required by School	161
	Satisfaction with Performance at School	161
	Rating of Learning Problems.....	162
2.3.2.2	Attitudes to Extra-Curricular Parenting Practices and Support.....	163
	Interest in Child's Activities (Student Statements)	163
	Knowledge of Friends	165
	Parents' behaviors promoting Reading (Student Statements).....	167
	Encouragement to Read (Student Statements)	169
2.3.2.3	Extra Tuition.....	170
	Remedial Lessons and Extra Tuition within the School.....	170
	Remedial Lessons and Extra Tuition outside School	171
	Native-Language Tuition	172
	German as a Foreign Language (DaF)/Second Language (DaZ) - Tuition	172
3	SCHOOL.....	173
3.1	Learning Environment in School.....	173
3.1.1	<i>Student-Teacher Relationship</i>	<i>173</i>
	<i>Positive Relationship with Teacher Mathematics</i>	<i>173</i>
	<i>Positive Relationship with Teacher: German</i>	<i>175</i>
3.1.2	<i>Evaluation of Teacher's Work</i>	<i>177</i>
	<i>Teaching Quality of Mathematics Teacher.....</i>	<i>177</i>
	<i>Teaching Quality of German Teacher</i>	<i>181</i>
3.1.3	<i>Instruction Quality.....</i>	<i>184</i>
	<i>Quality of mathematicsinstruction</i>	<i>184</i>
	<i>Quality of German instruction</i>	<i>186</i>
3.1.4	<i>Reading in School.....</i>	<i>188</i>
	<i>Forms of Reading in School (Student Statements)</i>	<i>188</i>

	<i>Activities after Reading at School</i>	189
3.2	Underlying School Environment	190
	<i>School Location – East/West</i>	190
4	LEISURE TIME	191
4.1	Activities related to School	191
	<i>Doing Homework</i>	191
	<i>Practicing</i>	191
	<i>Private Tuition:</i>	192
	<i>Conversations with Friends and Siblings about School</i>	192
4.2	Activities outside School	193
4.2.1	Informal Leisure Time Activities	193
	<i>Doing Sports</i>	193
	<i>Playing a Musical Instrument</i>	193
	<i>Playing a Games Console</i>	194
	<i>Listening to Audio Plays or AudioBooks</i>	194
	<i>Social Contacts: Frequency and Social Circle</i>	195
4.2.2	Courses in Leisure Time	195
	<i>Sports Course</i>	195
	<i>Music Course</i>	196
	<i>Language Course</i>	196
	<i>Study Group</i>	197
	<i>Private Tuition</i>	197
	<i>Other Course</i>	198
4.2.3	Reading	199
	<i>Reading Habits</i>	199
	<i>Reading Habits: Text Type and Situation</i>	201
	<i>Time Spent Reading</i>	202
	<i>Recent handling of Books</i>	203
	<i>Book Gifts</i>	204
	<i>Library Use: Frequency and Activities</i>	205
4.2.4	Writing	206
	<i>Writing Letters, Stories, Diaries</i>	206
4.2.5	Use of Computers	206
	<i>Computer Use: Yes/No</i>	206
	<i>Computer Use: Location and Frequency</i>	207
	<i>Computer Use: Activities</i>	208
4.2.6	Television	209
	<i>Television Frequency</i>	209
	BIBLIOGRAPHY	210

Explanatory Notes on the ELEMENT Handbook of Scales

General Information

This handbook of scales documents the survey instruments used in the ELEMENT study (*Survey of Reading and Mathematics Comprehension – Developments in Grades 4 to 6 in Berlin*) commissioned by the Berlin Senate Administration for Education, Youth, and Sport in 2003 and conducted under the scholarly direction of Prof. Dr. Dr. Lehmann from the Humboldt University in Berlin. In three survey waves, developments in reading and mathematics comprehension were assessed at Berlin's primary and 10-plus grammar schools in 2003, 2004, and 2005. The present handbook of scales was created in late 2009/early 2010 by the Research Data Centre (Forschungsdatenzentrum, FDZ) at the Institute of Educational Improvement (Institut zur Qualitätsentwicklung im Bildungswesen, IQB) of the Humboldt University in Berlin. The documentation of the survey instruments is designed as an aid to working with the ELEMENT data sets provided by the FDZ at the IQB. Further information on the design, execution, and findings of the ELEMENT study can be found in the related research reports (see Lehmann & Nikolova 2005a and 2005b, Lehmann & Lenkeit 2008).

The document is divided into two main sections: Part 1 mainly documents the scales and variables for the subject-specific achievement tests. This section also contains descriptions of the identification variables and personal data on participation status (tracking variables) as well as documentation of the weight variables used in the data set. The second main section describes the instruments pertaining to factors of situational context and differentiates students' individual educational context, information on behaviour during leisure time and family background, and underlying school environments. The data sources were subject-specific achievement tests, student and parent questionnaires, and information from student records.

Information on Documentation

Basic information on the survey waves (if known), variable name and label in the data set, data source (if known), and, where applicable, coding is available for every variable. Three documentation formats can further be differentiated:

Single-item variables – The "Factors of Situational Context" section, in particular, contains a series of single-item variables with mostly a categorical response format. The variable label contains the item wording; the response categories are presented, and any special characteristics are referred to under notes. The item analysis presents frequencies in percent for response categories and/or – with

continuous single-item variables – consolidates the maximum values at the upper interval limits (weighted mean) for intervals of frequency distribution (percentiles).

Scales – Within the "Factors of Situational Context" section, a number of working models are specified in the form of scales generated from separate questionnaire items in accordance with the hypotheses of classical test theory. Scale name and label, the items' variable name and associated label, coding information, number of items, and type of scaling are supplemented by the scale analysis: size of the measured sample, descriptive values for the separate items (mean, standard deviation, discrimination index) and the scales (mean, standard deviation), and information on reliability (Cronbach's alpha). Furthermore, items to be excluded from scaling on account of an insufficient discrimination index ($r_{it} < .3$) and items whose polarity is to be reversed are indicated. All scale and item analyses are based on the first of the five available imputation data sets¹.

Performance scales – The performance scores from the subject areas of German reading comprehension, German spelling, mathematics, and English are scaled applying the item response theory. The respective underlying metrics are stated in the documentation.² This also provides information on scale name and label, data source, and origin of the survey instruments, as well as the number of items to be worked through in the achievement tests. The scale analysis provides information on the sample size, descriptive parameters (mean, standard deviation, extreme values) and frequencies (weighted mean of percentiles).

The majority of the variable names contained in the data sets and documented here adhere to the following naming guidelines:

¹ SUF_element_imp1.sav

² The present data set provides only overall scores for each student and no separate raw scores for the performance tests.

Position	Content	Category	Symbol
1	Measuring time	ELEMENT 4	A
	Measuring time	ELEMENT 5	B
	Measuring time	ELEMENT 6	C
	Other (if not classified)		X
2-3/4	Performance test	German reading comprehension	dl
	Performance test	German spelling	dr
	Performance test	Mathematics	ma
	Performance test	English	en
	Performance test	Cognitive ability	kft
	Questionnaire	Student	sf
	Questionnaire	Parents	ef
	Scale		ska
	Index		in
	Grade		not
	Weight		gew
	Personal characteristic		pr
4/5-8	Item	Item block, sub-item	Numbering in original ELEMENT data set or in accordance with the order in the instruments
Final symbol	Imputation		Z
	Scales or variables generated at the FDZ, not contained in original ELEMENT data set		N

Part I Subject Performance

1 Tracking Variables

Imputation

Variable name: Imputation_

Variable label: Imputation number

Notes: An additional variable, *Imputation_*, was generated by the Research Data Centre at the Institute for Educational Progress which is not contained in the original ELEMENT data set and assigns a value of 1 to 5 to every imputation data set. This makes it possible to create a pooling data set in SPSS which distinguishes between the five imputation steps and can be used to output consolidated analyses.

1.1 Identification Variables

Student ID (FDZ)

Variable name: ELEMENT 4: ID_IQB
ELEMENT 5: ID_IQB
ELEMENT 6: ID_IQB

Variable label: ELEMENT 4: Person ID Scientific Use File IQB FDZ
ELEMENT 5: Person ID Scientific Use File IQB FDZ
ELEMENT 6: Person ID Scientific Use File IQB FDZ

Notes: A further ID variable not present in the original ELEMENT data set was generated and assumes a value between 1001 and 5926. This makes it possible to uniquely identify each student in all five imputation data sets and, for example, where applicable create a pooling data set for further analyses.

Student ID (Original)

Variable name: ELEMENT 4: Aprid
ELEMENT 5: Bprid
ELEMENT 6: Cprid

Variable label: ELEMENT 4: ID E4
ELEMENT 5: ID E5
ELEMENT 6: ID E6

Notes: Initial student ID variable from the original ELEMENT data set

School ID (IQB-FDZ New)

Variable name:	ELEMENT 4:	ApridsN
	ELEMENT 5:	BpridsN
	ELEMENT 6:	CpridsN
Variable label:	ELEMENT 4:	ID school E4 new
	ELEMENT 5:	ID school E5 new
	ELEMENT 6:	ID school E6 new
Notes:	A further school ID variable not present in the original ELEMENT data set was generated and assigns a value to each school.	

Class ID (IQB-FDZ New)

Variable name:	ELEMENT 4:	ApridkIN
	ELEMENT 5:	BpridkIN
	ELEMENT 6:	CpridkIN
Variable label:	ELEMENT 4:	ID class E4 new
	ELEMENT 5:	ID class E5 new
	ELEMENT 6:	ID class E6 new
Notes:	A further class ID variable not present in the original ELEMENT data set was generated and assigns a value to each class. The class is represented by the final character; all preceding characters are identical to the matching school ID.	

School District ID

Variable name: ELEMENT 4: Apridbz
 ELEMENT 5: Bpridbz
 ELEMENT 6:

Variable label: ELEMENT 4: ID district E4
 ELEMENT 5: ID district E5
 ELEMENT 6:

Notes: Only a distinction by school location in East or West Berlin is available for ELEMENT 6 (see *Cprbzow*).

Coding:	Value	Value label
	1	Mitte
	2	Tiergarten
	3	Wedding
	4	Prenzlauer Berg
	5	Friedrichshain
	6	Kreuzberg
	7	Charlottenburg
	8	Spandau
	9	Wilmerdorf
	10	Zehlendorf
	11	Schöneberg
	12	Steglitz
	13	Tempelhof
	14	Neukölln
	15	Treptow
	16	Köpenick
	17	Lichtenberg
	18	Weißensee
	19	Pankow
	20	Reinickendorf
	21	Marzahn
	22	Hohenschönhausen
	23	Hellersdorf

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Apridbz	1,3	3,4	3,7	2,9	3,3	3,7	2,7	7,1	5,7	5,2	2,3	7,1
	13	14	15	16	17	18	19	20	21	22	23	N
	4,4	7,3	2,3	1,7	9,1	2,0	1,6	10,0	3,0	6,9	3,2	4926
	1	2	3	4	5	6	7	8	9	10	11	12
Bpridbz	1,2	3,4	3,7	2,7	3,3	3,8	2,7	7,1	5,6	5,2	2,3	7,1
	13	14	15	16	17	18	19	20	21	22	23	N
	4,5	7,3	2,3	1,8	9,0	2,0	1,6	10,0	3,0	6,8	3,3	4781

1.2 Information on Participation

Participation Status

Variable name: ELEMENT 4:
ELEMENT 5: Bprtsta
ELEMENT 6: Cprtsta

Variable label: ELEMENT 4:
ELEMENT 5: Participation status E5
ELEMENT 6: Participation status E6

Notes: As opposed to the *test status*, these variables summarise participation over the longitudinal study.

Coding:

Bprtsta		Cprtsta	
Value	Value label	Value	Value label
1	Longitudinal study 4/5	0	Data lost
2	Leave end 4	1	Longitudinal study 4/5/6
3	Start beginning 5	2	Start beginning 6
4	Move to grammar school	3	Longitudinal study 5/6
5	Move to parallel class	4	Leave end 5
6	Move to other primary school	5	Longitudinal study 4/6

Item Analysis

Variable	1	2	3	4	5	6	N
Bprtsta	88,6	0	7,1	3,3	0,9	0,1	4781
Cprtsta	0,9	85,9	2,9	5,9	4,4	0	4926

Test Status

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cprtsts
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Test status E6
Notes:	The <i>test status</i> provides information on participation/reasons for non-participation in the ELEMENT 6 survey cycle.	
Coding:	Value	Value label
	0	Data lost
	1	Participated
	2	Absent
	3	School/class left unknown
	4	Other primary school Berlin
	5	Other grammar school Berlin
	6	Other German Land
	7	Other country
	8	Repeating grade
	9	Other ELEMENT school

Item Analysis

Variable	1	2	3	4	5	6	N
Bprtsta	88,6	0	7,1	3,3	0,9	0,1	4781
Cprtsta	0,9	85,9	2,9	5,9	4,4	0	4926

Test Status: English Test

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cprten
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Participation in English test
Notes:	<i>Test status: English test</i> provides information on participation in the English test, which was only conducted in ELEMENT 6.	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Cprten	6,1	93,9	4882

Person Completing Questionnaire: Parent Questionnaire

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0101, Aef0102
Variable label:	Aef0101 Aef0102	Questionnaire completed by Questionnaire completed by following other person:
Notes:	<p><i>Person completing questionnaire: parent questionnaire states which person completed the parent questionnaire.</i></p> <p><i>Aef0102 open-response format</i></p>	
Coding:	Aef0101 Value 1 2 3	Value label Mother, stepmother, or female guardian Father, stepfather, or male guardian Someone else

Item Analysis

Variable	1	2	3	N
Aef0101	81,3	17,1	1,4	2861

1.3 Weighting and Standard Error Estimation

Population Weights

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Agewp Bgewp Cgewp
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Population weight grade 4 Population weight grade 5 Population weight grade 6
Notes:	<p>"Every student in the ELEMENT primary school sample represents a specific number of other students in the parent population. The ratio between the population and the sample in a given stratum (sub-group; here defined by districts) determines the probability that an individual will be part of the sample. The unequal sample probabilities in the schools, grades, and students surveyed can be accommodated with appropriate weighting. The primary school sample was weighted here such that the proportional number of actual student numbers at district level is retained." (Lehmann & Nikolova 2005a, p. 11)</p>	

Subject-Specific Weights

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Agewles, Agewma, Agewrs
Variable label:	Agewles Agewma Agewrs	Population weight reading Population weight mathematics Population weight spelling

Weighting by Grammar School Quota from Grade 7

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cgewp7GY
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Sample weight by grammar school quota from Grade 7

Senate Weight: District Comparison - Primary School Students

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Agewsnls, Agewsnm, Agewsnrs
Variable label:	Agewsnls Agewsnm Agewsnrs	Senate weight reading for district comparison (primary schools only) Senate weight mathematics for district comparison (primary schools only) Senate weight spelling for district comparison (primary schools only)
Notes:	"For the comparative analysis of the districts, a further weighting factor was calculated which enables the inclusion in the relevant analyses of all districts with the same weight, irrespective of the differing numbers of students at district level." (Lehmann & Nikolova 2005a, p. 11)	

House Weight: Subject-Specific

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Agewhsl, Agewhsm, Agewhsrs
Variable label:	Agewhsl Agewhsm Agewhsrs	House weight reading House weight mathematics House weight spelling

Jackknife Repeated Replication: Jackknife Sampling Zone

Variable name:	ELEMENT 4:	Agewjkz
	ELEMENT 5:	Bgewjkz
	ELEMENT 6:	
Variable label:	ELEMENT 4:	Jackzone E4
	ELEMENT 5:	Jackzone E5
	ELEMENT 6:	
Notes:	"As in PISA, TIMSS, PIRLS, and other comparable studies, the Jackknife Repeated Replication method, which takes account of the complex cluster sampling design, was used in ELEMENT to calculate standard errors." (Lehmann & Nikolova 2005a, p. 11)	

Jackknife Repeated Replication: Jackknife Replicate

Variable name:	ELEMENT 4:	Agewjkrp
	ELEMENT 5:	Bgewjkrp
	ELEMENT 6:	
Variable label:	ELEMENT 4:	Jackzone Replication Weight E4
	ELEMENT 5:	Jackzone Replication Weight E5
	ELEMENT 6:	

2 German

2.1 Reading Comprehension

2.1.1 Performance Scale

Performance Scale: Reading Comprehension (ELEMENT-KESS Scale)

Scale name:	ELEMENT 4:	Adl
	ELEMENT 5:	Bdl
	ELEMENT 6:	Cdl
Scale label:	ELEMENT 4:	WLEskala reading comprehension E4
	ELEMENT 5:	WLEskala reading comprehension E5
	ELEMENT 6:	WLEskala reading comprehension E6
Imputation name:	ELEMENT 4:	AdlZ
	ELEMENT 5:	BdlZ
	ELEMENT 6:	CdlZ
Imputation label:	ELEMENT 4:	WLEskala reading comprehension A imp
	ELEMENT 5:	WLEskala reading comprehension E5 imp
	ELEMENT 6:	WLEskala reading comprehension E6 imp
Details on and origin of instruments:	ELEMENT 4:	Primary school students survey: - 2 prose texts: a. "Tonklumpen" (IGLU/PIRLS, Bos et al. 2003) b. "Juan" (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999)
		- 1 factual text: "Mücken" (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999)
		10-plus grammar school students survey: 1 prose text: "Mäuse" (IGLU/PIRLS, Bos et al 2003)
		2 factual texts: a. "Mücken" (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999) b. "Flusswanderung" (IGLU/PIRLS, Bos et al. 2003)

- ELEMENT 5:
- 2 prose texts:
 - a. "Tonklumpen" (IGLU/PIRLS, Bos et al. 2003)
 - b. "Juan" (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999)
 - 1 factual text:
 - "Mücken" (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999)
 - 1 functional text:
 - "Leonardo" (IGLU/PIRLS, Bos et al. 2003)
- ELEMENT 6:
- 4 prose texts:
 - a. "Die Rache des Zauberers" (LAU 6+7, Lehmann, Gänsfuß & Peek 1999)
 - b. LAU 6+7 "Ich bin nicht blind" (LAU 6+7, Lehmann, Gänsfuß & Peek 1999)
 - c. LAU 6+7 "Anzeigen" (LAU 6+7, Lehmann, Gänsfuß & Peek 1999)
 - d. "Tonklumpen" (IGLU/PIRLS, Bos et al. 2003)
 - 1 functional text:
 - "Leonardo" (IGLU/PIRLS, Bos et al. 2003)

Notes: For this scale, only the overall score and no individual raw scores are available for each student.

Number of items:

ELEMENT 4:	24
ELEMENT 5:	32
ELEMENT 6:	37

Scaling: Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set. The results are reported on a metric with a mean of 100 and a standard deviation of 15. (For more detailed information, see Lehmann & Nikolova 2005a, p. 16, Lehmann & Nikolova 2005b, p. 12, and Lehmann & Lenkeit 2008, p. 13)

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Adl	104,06	15,81	36,64	150,91	4303
Bdl	110,11	13,57	57,29	163,18	4511
Cdl	115,04	13,50	46,39	165,82	4479

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Adl	75,42	83,11	93,84	106,40	114,23	121,67	127,00
	Bdl	85,27	90,74	101,91	111,28	120,49	127,41	130,16
	Cdl	91,63	96,72	106,19	115,75	124,98	132,23	135,32

2.1.2 Difficulty Level

Achieved Difficulty Level: Reading Comprehension

Variable name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	
Variable label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	
Imputation name:	ELEMENT 4:	Adlanl
	ELEMENT 5:	Bdlanl
	ELEMENT 6:	Cdlanl
Imputation label:	ELEMENT 4:	Achieved difficulty level - German reading comprehension E4
	ELEMENT 5:	Achieved difficulty level - German reading comprehension E5
	ELEMENT 6:	Achieved difficulty level - German reading comprehension E6
Data source:	Performance tests	
Notes:	The test assignments were split up into distinguishable difficulty levels which could be respectively attained with sufficient probability by persons of specific ability levels. The enables interpretation of the content of the test values. The higher the achieved difficulty level, the better student performance is to be evaluated.	
Coding:	Value	Value label
	1	Level 1, up to 82 points
	2	Level 2, 83-92 points
	3	Level 3, 93-102 points
	4	Level 4, 103-113 points
	5	Level 5, from 114 points

Item Analysis

Variable	1	2	3	4	5	N
Adlanl	10,8	13,1	21,1	27,4	27,6	4926
Bdlanl	2,9	9,3	17,2	27,5	43,0	4926
Cdlanl	1,3	4,6	13,3	25,0	55,8	4926

2.1.3 Anchors

Performance Scale: Anchoring Reading Comprehension to LAU (Aspects of Learning Background and Learning Development) (LAU-5 and LAU-7 Scale)

Scale name: ELEMENT 4: Adllau5
ELEMENT 5:
ELEMENT 6: Cdllau7

Scale label: ELEMENT 4: Scale reading anchored to Lau5
ELEMENT 5:
ELEMENT 6: Scale reading anchored to Lau7

Scaling: "In addition to the ELEMENT-KESS scales, the so-called LAU-5 scales were developed for subject performance tests in [...] German reading comprehension. [...] The scale metric of the LAU-5 scales developed in ELEMENT for [...] reading comprehension was normalised such that the mean values of the Hamburg LAU 5 students are defined as 100 with a standard deviation of 25. These mean values and standard deviations were then used as reference values for normalising the ELEMENT and KESS scale values. This makes possible a direct comparison between the ELEMENT and LAU-5 student populations." (Lehmann & Nikolova 2005a, p. 16f)

Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set.

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Adllau5	110,45	21,94	16	176	4303
Cdllau7	113,33	20,00	10,70	189,53	4479

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Adllau5	70,52	81,21	96,14	113,66	124,54	134,93	142,42
	Cdllau7	78,72	86,30	100,29	114,31	127,96	138,85	143,50

Performance Scale: Anchoring Reading Comprehension to IGLU/PIRLS (IGLU Scale)

Scale name: ELEMENT 4: Adliglu
ELEMENT 5:
ELEMENT 6:

Scale label: ELEMENT 4: Scale reading anchored to IGLU
ELEMENT 5:
ELEMENT 6:

Scaling: "In addition to the ELEMENT KESS scales, the so-called IGLU scales were developed for subject performance tests in [...] German reading comprehension. [...] A comparison of Berlin student performance with achievement levels in other German Länder was similarly made possible [as with the LAU scales] by using IGLU items. On the basis of 13 of 14 reading tasks [...] from the national IGLU study, subsequent classification of the Berlin results on the IGLU scale metric was carried out." (Lehmann & Nikolova 2005a, p. 16f)

Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set.

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Adliglu	531,10	64,87	323,06	711,20	2788

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	407,97	444,60	497,11	536,69	572,46	605,27	627,05

2.2 Spelling

2.2.1 Performance Scale

Performance Scale: Spelling

Scale name:	ELEMENT 4:	Adr
	ELEMENT 5:	
	ELEMENT 6:	
Scale label:	ELEMENT 4:	WLEskala spelling E4
	ELEMENT 5:	
	ELEMENT 6:	
Details on and origin of instruments:	ELEMENT 4:	Spelling test DoSE – Dortmunder Schriftkompetenz-Ermittlung (Löffler & Meyer Schepers 2001)
	ELEMENT 5:	
	ELEMENT 6:	
Notes:	For this scale, only the overall score and no individual raw scores are available for each student. (DOSE quantitative analysis: number of correctly spelt test words and number of single errors per test word; DOSE qualitative evaluation: number of correctly spelt test words).	
Number of items:	ELEMENT 4:	19 sentences with 45 gaps
	ELEMENT 5:	
	ELEMENT 6:	
Scaling:	Only the ELEMENT primary school data set, within the framework of item response theory (IRT), is used for developing the scales, with weighted likelihood estimates given as measuring values in the data set. The results are reported on a metric with a mean of 100 and a standard deviation of 15. "The linear transformation of the person-related values at Berlin '10-plus' grammar schools was carried out in accordance with the relevant allocations." (Lehmann & Nikolova 2005a, p. 16)	

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Adr	104,01	16,52	38,28	158,75	4308

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	79,16	84,32	92,98	102,13	114,97	124,74	130,27

3 Mathematics

3.1 Performance Scale

Performance Scale: Mathematics

Scale name:	ELEMENT 4:	Ama
	ELEMENT 5:	Bma
	ELEMENT 6:	Cma
Scale label:	ELEMENT 4:	WLEskala mathematics E4
	ELEMENT 5:	WLEskala mathematics E5
	ELEMENT 6:	WLEskala mathematics E6
Imputation name:	ELEMENT 4:	AmaZ
	ELEMENT 5:	BmaZ
	ELEMENT 6:	CmaZ
Imputation label:	ELEMENT 4:	WLEskala mathematics E4 imp
	ELEMENT 5:	WLEskala mathematics E5 imp
	ELEMENT 6:	WLEskala mathematics E6 imp
Details on and origin of instruments:	ELEMENT 4:	14 tasks (IGLU/PIRLS or TIMS, Bos et al. 2003) 10 tasks (LAU 5, Lehmann, Gänsfuß & Peek, 1999 originally HST4/5, Mietzel & Willenberg 1999)
	ELEMENT 5:	40 tasks (LAU 5+7, Lehmann, Gänsfuß & Peek, 1999; QuaSUM, Lehmann et al. 2000; PIRLS/IGLU, Bos et al. 2003)
	ELEMENT 6:	29 tasks (LAU 6+7, Lehmann, Gänsfuß & Peek, 1999) 14 tasks (IGLU/PIRLS, Bos et al. 2003, 12 tasks originally TIMS, Adams & Gonzales 1996) 15 tasks (QuaSUM, Lehmann et al. 2000)
Notes:	For this scale, only the overall score and no individual raw scores are available for each student. The test content deals with the three subjects of algebra, arithmetic, and geometry.	
Number of items:	ELEMENT 4:	24
	ELEMENT 5:	40
	ELEMENT 6:	49
Scaling:	Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set. The results are reported on a metric with a mean of 100 and a standard deviation of 15. (For more detailed information, see Lehmann & Nikolova 2005a, p. 16, Lehmann & Nikolova 2005b, p. 11f, and Lehmann & Lenkeit 2008, p. 13)	

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Ama	103,27	15,81	39,57	150,23	4307
Bma	112,91	16,18	63,91	169,14	4530
Cma	122,22	17,16	62,17	179,06	4479

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Ama	77,94	84,15	92,20	102,29	113,89	121,80	127,17
	Bma	87,73	91,39	101,13	112,14	123,24	133,51	141,03
	Cma	95,41	100,07	108,30	122,62	133,51	144,78	151,81

3.2 *Difficulty Level*

Achieved Difficulty Level: Mathematics

Scale name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	
Scale label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	
Imputation name:	ELEMENT 4:	Amaanm
	ELEMENT 5:	Bmaanm
	ELEMENT 6:	Cmaanm
Imputation label:	ELEMENT 4:	Achieved difficulty level – mathematics E4
	ELEMENT 5:	Achieved difficulty level – mathematics E5
	ELEMENT 6:	Achieved difficulty level – mathematics E6
Data source:	Performance tests	
Notes:	The test assignments were split up into distinguishable difficulty levels which could be respectively attained with sufficient probability by persons of specific ability levels. The enables interpretation of the content of the test values. The higher the achieved difficulty level, the better student performance is to be evaluated.	
Coding:	Value	Value label
	0	Level 0, up to 62 points
	1	Level 1, 63-76 points
	2	Level 2, 77-89 points
	3	Level 3, 90-102 points
	4	Level 4, 103-115 points
	5	Level 5, 116-128 points
	6	Level 6, from 129 points

Item Analysis

Variable	0	1	2	3	4	5	6	N
Amaanm	0,3	3,7	16,1	33,7	25,8	16,2	4,1	4926
Bmaanm	0,0	0,7	5,3	21,3	28,2	29,4	15,2	4926
Cmaanm	0,0	0,1	1,5	13,1	22,8	28,4	34,0	4926

3.3 Anchors

Performance Scale: Anchoring Mathematics to LAU (LAU-5 and LAU-7 Scale)

Scale name: ELEMENT 4: Amalau5
 ELEMENT 5:
 ELEMENT 6: Cmalau7

Scale label: ELEMENT 4: Scale mathematics anchored to LAU5
 ELEMENT 5:
 ELEMENT 6: Scale mathematics anchored to LAU7 E6

Scaling: "In addition to the ELEMENT KESS scales, the so-called LAU-5 scales were developed for the subject performance tests in [...] mathematics. [...] The scale metric of the LAU-5 scales developed in ELEMENT for [...] mathematics was normalised such that the mean values of the Hamburg LAU 5 students are defined as 100 with a standard deviation of 25. These mean values and standard deviations were then used as reference values for normalising the ELEMENT and KESS scale values. This makes possible a direct comparison between the ELEMENT and LAU-5 student populations." (Lehmann & Nikolova 2005a, p. 16f)

Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set.

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Bmalau5	115,01	26,60	40	194	4305
Cmalau7	122,20	26,69	28,42	211,17	4479

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Bmalau5	72,24	82,77	96,34	113,33	132,84	146,19	155,28
	Cmalau7	80,69	87,86	100,53	122,72	139,71	157,38	168,42

Performance Scale: Anchoring Mathematics to IGLU (IGLU Scale)

Scale name: ELEMENT 4: Amaiglu
ELEMENT 5:
ELEMENT 6:

Scale label: ELEMENT 4: Scale mathematics anchored to IGLU
ELEMENT 5:
ELEMENT 6:

Scaling: "In addition to the ELEMENT KESS scales, the so-called IGLU scales were developed for the subject performance tests in [...] mathematics. [...] A comparison of Berlin student performance with achievement levels in other German Länder was similarly made possible [as with the LAU scales] by using IGLU items. On the basis of the [...] 14 mathematics test items from the national IGLU study, subsequent classification of the Berlin results on the IGLU scale metric was carried out." (Lehmann & Nikolova 2005a, p. 16f)

Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set.

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Amaiglu	295,14	57,92	58,84	512,91	2810

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	200,15	227,51	250,95	293,07	336,44	362,09	395,01

4 English

4.1 *Performance Scale*

Performance Scale: English

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CenZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	WLEskala English E6 imp
Details on and origin of instruments:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	4 completion exercises (LAU, Lehmann, Gänßfuß & Peek, 1999): a. "Bauernhof" b. "Norfolk" c. "Radtour" d. "Zoo"
Notes:	For this scale, only the overall score and no individual raw scores are available for each student. The test covers the areas of reading comprehension, vocabulary, grammatical proficiency, and orthographic proficiency.	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	4 completion exercises with 91 word additions
Scaling:	Item response theory (IRT) is used for scaling, with weighted likelihood estimates given as measuring values in the data set. The results are reported on a metric with a mean of 100 and a standard deviation of 20.	

Scale Analysis

Variable	\bar{x}	SD	min	max	N
CenZ	102,08	21,05	23,31	184,76	4926

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	69,09	75,32	87,27	101,70	116,74	129,11	135,83

4.2 Anchors

Performance Scale: Anchoring English to LAU7 (LAU-7 Scale)

Scale name: ELEMENT 4:
ELEMENT 5:
ELEMENT 6: Cenwlau7
Cenmlau7

Scale label: ELEMENT 4:
ELEMENT 5:
ELEMENT 6: WLEskala English anchored to Lau7
MLEskala English anchored to Lau7

Scaling: "For the first time, achievement levels were also assessed in English in the third survey. Comparability with the results of the Hamburg LAU study was achieved by carrying over the difficulty parameters of 84 of the 91 text gaps to be completed in the Hamburg study." (Lehmann & Lenkeit 2008, p. 13)

Item response theory (IRT) is used for scaling, with weighted likelihood estimates (*Cenwlau7*) or maximum likelihood estimates (*Cenmlau7*) given as measuring values in the data set. The results are reported on a metric with a mean of 100 and a standard deviation of 20.

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Cenwlau7	102,00	20,71	35,14	184,76	4083
Cenmlau7	101,72	21,27	30,00	131,26	4111

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Cenwlau7	69,09	75,32	87,27	101,70	116,74	128,89	135,83
	Cenmlau7	68,65	75,02	87,15	101,69	116,83	129,11	136,21

5 General Subject Performance

5.1 Index

Performance Scale: General Subject Performance Index

Scale name:	ELEMENT 4:	Ainafi
		Ainafir
	ELEMENT 5:	
	ELEMENT 6:	Cinafi Cinafir
Scale label:	ELEMENT 4:	AFI general subject performance index end 4 D/M
		AFI general subject performance index end 4 D/M, rounded off
	ELEMENT 5:	
	ELEMENT 6:	AFI general subject performance index end 6 D/M AFI general subject performance index end 6 D/M, rounded off

Notes: "Beyond the individual evaluation of the three test instruments used to assess subject performance, it is useful and possible to consolidate all the results of the sub-tests into a single test value. If the individual sub-tests are submitted to a correlation analysis, it can be seen that they are relatively strongly correlated with one another. The sub-tests are therefore not only valid as good indicators for a specific ability but are at the same time denotative of a general subject performance. The generation of an overall score is therefore empirically well-founded. [...] [As a result,] the [...] subject performance scales [...] are consolidated as a general subject performance index." (Lehmann & Lenkeit 2008, p. 28f). For each measuring time, the values of the imputed performance scales for reading comprehension and mathematics enter into the calculation of the general subject performance index (AFI).

Scaling: "In generating the general subject performance index (AFI), the mean test scores in the subjects of German and mathematics are determined and projected onto a scale with a mean value of 100 and a standard deviation of 15. The initial values are first standardised using a so-called "z-transform". [see variables *AdlZZ*, *CdlZZ*, *AmaZZ*, and *CmaZZ*]" (Lehmann & Lenkeit 2008, p. 28f)

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Ainafi	102,82	14,36	57,29	150,57	4926
Ainafir	102,86	14,37	55,00	150,00	4926
Cinafi	118,04	14,36	54,28	172,44	4926
Cinafir	118,00	14,41	55,00	170,00	4926

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Ainafi	78,26	83,63	93,11	103,50	113,15	120,68	124,50
	Ainafir	80,00	85,00	95,00	105,00	115,00	120,00	125,00
	Cinafi	94,39	98,66	107,32	118,58	128,37	136,27	140,63
	Cinafir	95,00	100,00	105,00	120,00	130,00	135,00	140,00

5.2 z-Transformations

Performance Scale: Reading Comprehension z-Transformation

Scale name: ELEMENT 4:
ELEMENT 5:
ELEMENT 6:

Scale label: ELEMENT 4:
ELEMENT 5:
ELEMENT 6:

Imputation name: ELEMENT 4: AdlZZ
ELEMENT 5:
ELEMENT 6: CdlZZ

Imputation label: ELEMENT 4: z-value: reading comprehension end 4 imp
ELEMENT 5:
ELEMENT 6: z-value: reading comprehension end 6 imp

Notes: Imputation of z-transformation for the performance scale reading comprehension

Scaling: "In generating the general subject performance index (AFI), the mean test scores in [...] German [...] are determined and projected onto a scale with a mean value of 100 and a standard deviation of 15. The initial values are first standardised using a so-called "z-transformation". (Lehmann & Lenkeit 2008, p. 28f)

Scale Analysis

Variable	\bar{x}	SD	min	max	N
AdlZZ	0	1	-4,17	2,99	4926
CdlZZ	0	1	-4,97	-3,74	4926

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	AdlZZ	-1,74	-1,41	-0,59	0,06	0,69	1,15	1,49
	CdlZZ	-1,67	-1,30	-0,71	0,09	0,76	1,15	1,52

Performance Scale: Mathematics z-Transformation

Scale name: ELEMENT 4:
ELEMENT 5:
ELEMENT 6:

Scale label: ELEMENT 4:
ELEMENT 5:
ELEMENT 6:

Imputation name: ELEMENT 4: AmaZZ
ELEMENT 5:
ELEMENT 6: CmaZZ

Imputation label: ELEMENT 4: z-value: mathematics end 4 imp
ELEMENT 5:
ELEMENT 6: z-value: mathematics end 6 imp

Notes: Imputation of z-transformation for the performance scale mathematics

Scaling: "In generating the general subject performance index (AFI), the mean test scores in [...] mathematics [...] are determined and projected onto a scale with a mean value of 100 and a standard deviation of 15. The initial values are first standardised using a so-called "z-transformation". (Lehmann & Lenkeit 2008, p. 28f)

Scale Analysis

Variable	\bar{x}	SD	min	max	N
AmaZZ	0	1	-3,95	3,00	4926
CmaZZ	0	1	-3,42	3,32	4926

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted Mean	AmaZZ	-1,54	-1,30	-0,64	-0,01	0,72	1,21	1,55
	CmaZZ	-1,51	-1,33	-0,76	-0,02	0,69	1,34	1,75

6 Basic Cognitive Abilities

Cognitive Abilities Test

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Akft
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Overall score KFT E4
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AkftZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Overall score KFT E4 imp
Details on and origin of instruments:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	2 sub-tests from KFT 4-12 R (Heller & Perleth 2000): verbal thinking V3 & figural thinking N2 – fluid intelligence
Notes:	The scores for each student are overall scores.	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	25 image & 20 word tasks
Scaling:	See test manual (Heller & Perleth 2000)	

Scale Analysis

Variable	\bar{x}	SD	min	max	N
Akft	29,51	10,12	0	44	4306
AkftZ	28,95	10,24	0	45	4926

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Akft	11,00	14,00	21,00	33,00	38,00	40,00	41,00
	AkftZ	11,00	13,00	21,00	32,00	38,00	40,00	41,00

Part II: Factors of Situational Context

1 Individual Student Data

1.1 Personal Characteristics

1.1.1 Gender

Gender

Variable name: Xprsex

Variable label: Gender

Imputation name: XprsexZ

Imputation label: Gender imp

Data source: n/a

Notes: *Xprsex* corresponds to the data of *Asf0101* but exhibits fewer missing values (*Xprsex*: 35; *Asf0101*: 504).

Coding:	Value	Value label
	0	Boys
	1	Girls

Item Analysis

Variable	0	1	N
Xprsex	50,2	49,8	4891
XprsexZ	50,2	49,8	4926

Gender (Student Statements)

Variable name: ELEMENT 4: Asf0101
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Gender E4
ELEMENT 5:
ELEMENT 6:

Data source: Student questionnaire

Coding Value Value label
0 Boys
1 Girls

Item Analysis

Variable	0	1	N
Asf0101	50,0	50,0	4422

1.1.2 Age

Age

Variable name: ELEMENT 4: Apralt
ELEMENT 5: Bpralt
ELEMENT 6:

Variable label: ELEMENT 4: Age E4
ELEMENT 5: Age E5
ELEMENT 6:

Data source: n/a

Notes: Statement of years and months in figures (format: YY,M)

Item Analysis

Variable	\bar{x}	SD	min	max	N
Apralt	10,54	0,53	8,3	13,7	4440
Bpralt	11,48	0,55	9,2	14,7	4719

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Apralt	9,83	10,0	10,17	10,50	10,83	11,17	11,50
	Bpralt	10,75	10,92	11,08	11,41	11,75	12,08	12,58

Month of Birth

Variable name: ELEMENT 4: Aprgm
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Month of birth E4
ELEMENT 5:
ELEMENT 6:

Data source: n/a

Notes: *Aprgm* corresponds to the data of *Asf0201* but exhibits fewer missing values (*Aprgm*: 1; *Asf0201*: 929).

Statement of months in number format (e.g. January = 1 etc.)

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12	N
Aprgm	8,9	7,2	8,6	8,1	7,7	7,3	8,6	9,7	9,6	8,2	8,3	7,7	4925

Month of Birth (Student Statements)

Variable name: ELEMENT 4: Asf0201
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Month of birth E4
ELEMENT 5:
ELEMENT 6:

Data source: Student questionnaire

Notes: Statement of month in number format (e.g. January = 1 etc.)

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12	N
Asf0201	9,1	7,5	8,2	7,8	7,6	7,4	8,3	9,4	9,7	8,6	8,4	8,1	3997

Year of Birth

Variable name: ELEMENT 4: Aprgj
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Year of birth E4
ELEMENT 5:
ELEMENT 6:

Data source: n/a

Notes: *Aprgj* corresponds to the data of *Asf0202* but exhibits fewer missing values (*Aprgj*: 444; *Asf0202*: 961).

Statement of year as two digits (format: YY)

Item Analysis

Variable	\bar{x}	SD	min	max	N
Aprgj	92,41	0,63	89	95	4482

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	91,00	92,00	92,00	92,00	93,00	93,00	93,00

Year of Birth (Student Statements)

Variable name: ELEMENT 4: Asf0202
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Year of birth E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student questionnaire

Coding: Value Value label
 1 1990
 2 1991
 3 1992
 4 1993
 5 1994
 6 1995
 7 1996

Item Analysis

Variable	1	2	3	4	5	6	7	N
Asf0202	0,4	4,9	48,2	45,3	1,0	0,1	0,1	3965

1.2 Test Motivation

Test Motivation: Student Questionnaire

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CskatmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Test motivation student questionnaire new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	3
Notes:	<p>High values represent a high level of test motivation. Items whose polarity is to be reversed for scaling are marked with a *.</p> <p>The items relate to the process of completing the student questionnaire.</p>	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf1703 – Csf1705
Variable label:	Csf1703 Csf1704 Csf1705* The following items were excluded from the scale analysis: Csf1701* Csf1702 Csf1706	<p>I was distracted while working through the tasks.</p> <p>I didn't find the test fun.</p> <p>I enjoy doing these kinds of tests.</p> <p>I worked through the test tasks very carefully.</p> <p>I didn't make much effort while working through the tasks.</p> <p>If we had been given grades, I would have made more effort.</p>

Item Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Csf1703							3,03	,94	,20
Csf1704							2,74	1,05	,53
Csf1705*							2,84	1,07	,37
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.54 \bar{x} = 8,61 SD = 2.22 min = 1, max = 4 N = 3720		
The following items were excluded from the scaling due to insufficient discrimination (< .3):									
	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Csf1701*							3,29	,71	,12
Csf1702							2,70	1,06	,12
Csf1706							2,20	1,11	,15
	min = , max = N =			min = , max = N =			min = 1, max = 4 N = 3755		

1.3 Educational Background and Status in the School System

Current Type of School: Primary School or 10-Plus Grammar School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cprsf
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Type of school E6
Data source:		
Notes:	<i>Type of school</i> indicates membership of either the primary or grammar school population	
Coding:	Value 0 1	Value label Primary school Grammar school

Item Analysis

Variable	0	1	N
Cprsf	64,3	35,7	4926

Grammar School: 8 or 9 Years Duration

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprsnll
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Fast-track students E4
Data source:	Student records	
Notes:	Fast-track student classes are an experiment in Berlin in which students attend grammar school from grade 5 and with streamlined syllabuses skip grade 8, with the result that the Abitur (university entry qualification) can be awarded after twelve years of schooling.	
Coding:	Value 0 1	Value label Normal student Fast-track student

Item Analysis

Variable	0	1	N
Aprsnll	97,0	3,0	4359

Number of Changes of School

Variable name: ELEMENT 4: Aprsw
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Number of changes of school E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Item Analysis

Variable	\bar{x}	SD	min	max	N
Aprsw	0,79	0,84	0	7	3674

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	0	0	0	1	1	2	2

Days Absent in the Full School Year

Variable name:	ELEMENT 4:	Aprftag
	ELEMENT 5:	Bprftag
	ELEMENT 6:	Cprftag
Variable label:	ELEMENT 4:	Days absent full school year E4
	ELEMENT 5:	Days absent full school year E5
	ELEMENT 6:	Days absent full school year E6
Data source:	Student records	

Item Analysis

Variable	\bar{x}	SD	min	max	N
Aprftag	7,11	7,73	0	91	3737
Bprftag	5,94	7,68	0	129	3147
Cprftag	7,24	8,05	0	92	3995

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Aprftag	0,00	0,00	2,00	5,00	10,00	16,00	22,00
	Bprftag	0,00	0,00	1,00	4,00	8,00	14,00	19,00
	Cprftag	0,00	0,00	2,00	5,00	10,00	17,00	23,00

Foreign Language from Grade 3

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cpr3fs
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Foreign language from 3rd grade
Data source:	Student records	
Coding:	Value	Value label
	0	None
	1	English
	2	French
	3	Other
	9	English and one other

Item Analysis

Variable	0	1	2	3	4	N
Cpr3fs	0,9	91,6	2,5	0,7	4,4	3931

1.3.1 Repetition of One or More Grades

Repetition: 1st Grade

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprkl1
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Repeated 1st grade E4
Data source:	Student records	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Aprkl1	98,3	1,7	4382

Repetition: Grade 2

Variable name: ELEMENT 4: Aprkl2
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Repeated grade 2 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkl2	98,1	1,9	4385

Repetition: Grade 3

Variable name: ELEMENT 4: Aprkl3
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Repeated grade 3 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkl3	98,7	1,3	4386

Repetition: Grade 4

Variable name: ELEMENT 4: Aprkl4
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Repeated grade 4 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkl4	98,3	1,7	4380

Repetition: Grade 5

Variable name: ELEMENT 4: Aprkl5
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Repeated grade 5 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkl5	98,0	2,0	4390

Repetition: General

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprkwdh
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Repeated grade E4
Notes:	Summary of variables <i>Aprkl1</i> , <i>Aprkl2</i> , <i>Aprkl3</i> , <i>Aprkl4</i> , <i>Aprkl5</i>	
Coding:	Value 0 1 2	Value label No grade repeated One grade repeated Two and more grade repeated

Item Analysis

Variable	0	1	2	N
Aprkwdh	92,8	6,5	0,7	4380

1.3.2 Skipping One or More Grades

Skipping: Grade 1

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprkue1
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Skipped grade 1 E4
Data source:	Student records	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aprkue1	98,9	1,1	4360

Skipping: Grade 2

Variable name: ELEMENT 4: Aprkue2
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Skipped grade 2 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkue2	98,9	1,1	4360

Skipping: Grade 3

Variable name: ELEMENT 4: Aprkue3
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Skipped grade 3 E4
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Aprkue3	99,2	0,8	4359

Skipping: Grade 4

Variable name: ELEMENT 4: Aprkue4
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Skipped grade 4 E4
ELEMENT 5:
ELEMENT 6:

Data source: Student records

Coding: Value Value label
0 No
1 Yes

Item Analysis

Variable	0	1	N
Aprkue4	99,6	0,4	4359

1.3.3 Pre-School Experience

Kindergarten/Nursery School Attendance (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0701, Aef0702
Variable label:	Aef0701 Aef0702	Did your child attend a kindergarten/nursery school in Germany? How long was your child in the kindergarten/the nursery school?
Data source:	Parent questionnaire	
Coding:	Aef0701 Value 0 1	Aef0702 Value 1 2 3 4 5
	Value label No Yes	Value label More than 2 years 2 years 1 to 2 years 1 year Less than 1 year

Item Analysis

Variable	0	1	N
Aef0701	5,86	94,14	3807

Variable	1	2	3	4	5	N
Aef0702	83,1	7,4	2,5	5,9	1,1	3550

Duration of Kindergarten Attendance (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprkgrt
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Kindergarten duration
Data source:	No information	
Notes:	<i>Aprkgrt</i> corresponds to the data of <i>Aef0202</i> but exhibits fewer missing values (<i>Aprkgrt</i> : 1232; <i>Aef0702</i> : 1376).	
Coding:	Value	Value label
	0	None
	1	Up to 1 year
	2	Up to 2 years
	3	More than 2 years

Item Analysis

Variable	0	1	2	3	N
Aprkgrt	3,9	6,8	9,5	79,8	3694

Start of Schooling

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Apres
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Start of schooling E4
Data source:	Student records	
Coding:	Value	Value label
	0	No information
	1	In preschool classes
	2	In grade 1

Item Analysis

Variable	0	1	2	N
Apres	15,70	26,00	58,10	4153

Start of Schooling: Year

Variable name: ELEMENT 4: Apresij
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Year in which school started
 ELEMENT 5:
 ELEMENT 6:

Data source: Student records

Notes: Statement of year as two digits (format: YY)

Item Analysis

Variable	\bar{x}	SD	min	max	N
Apresij	100,81	63,69	93	2000	4452

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	98,00	98,00	98,00	99,00	99,00	99,00	99,00

Start of Schooling: School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Apresis
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Start of schooling at school E4
Data source:	Student records	
Notes:	<i>Start of schooling: school</i> indicates the location of the school, either by German Land, country, or district of Berlin .	
Coding:	Value	Value label
	1	Baden-Württemberg
	2	Bavaria
	3	Berlin
	4	Brandenburg
	5	Bremen
	6	Hamburg
	7	Hessen
	8	Mecklenburg-Vorpommern
	9	Lower Saxony
	10	North Rhine-Westphalia
	11	Rhineland-Palatinate
	12	Saarland
	13	Saxony
	14	Saxony-Anhalt
	15	Schleswig-Holstein
	16	Thuringia
	21	Afghanistan
	22	Albania
	23	Bosnia and Herzegovina
	24	Bulgaria
	25	France
	26	Greece
	27	Italy
	28	Yugoslavia
	29	Croatia
	30	Poland
	31	Portugal
	32	Romania
	33	Russia
	34	Slovenia
	35	Spain
	36	Turkey
	37	UK
	38	Cyprus
	39	Other Europe
	40	Africa
	41	Asia
	42	USA
	43	Canada
	44	Latin America
	45	Australia/Oceania
	46	Other
	101	Mitte
	102	Tiergarten
	103	Wedding
	104	Prenzlauer Berg

105	Friedrichshain
106	Kreuzberg
107	Charlottenburg
108	Spandau
109	Wilmerdorf
110	Zehlendorf
111	Schöneberg
112	Steglitz
113	Tempelhof
114	Neukölln
115	Treptow
116	Köpenick
117	Lichtenberg
118	Weißensee
119	Pankow
120	Reinickendorf
121	Marzahn
122	Hohenschönhausen
123	Hellersdorf

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Apresis	0,1	0,1	0	0,4	0	0	0,1	0,1	0,2	0,2	0	0	0,1	0
	15	16	21	22	23	24	25	26	27	28	29	30	31	32
	0,1	0	0	0,1	0	0	0	0	0	0	0	0	0	0
	33	34	35	36	37	38	39	40	41	42	43	44	45	46
	0,5	0	0	0,2	0	0	0,1	0,1	0,3	0	0	0	0	0,4
	101	102	103	104	105	106	107	108	109	110	111	112	113	114
	2,2	3,2	4,3	3,2	2,1	4,5	3,1	6,5	4,2	6,2	2,8	5,3	4,9	7,4
	115	116	117	118	119	120	121	122	123					N
	2,0	2,8	8,5	1,7	2,4	7,1	3,3	5,0	3,9					4311

Student Knowledge of German on Starting School (Parent Statements)

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskadkN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Student knowledge of German on starting school new
Data source:	Parent questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	6
Notes:	High values represent a good knowledge of German. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label None at all Not particularly good Mean Very good
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0801 – Aef0805, Aef0807
Variable label:	Aef0801 Aef0802 Aef0803 Aef0804 Aef0805 Aef0807 The following items were excluded from the scaling: Aef0806	German knowledge on starting school - recognise majority of letters German knowledge on starting school - read some words German knowledge on starting school - read sentences German knowledge on starting school - write the letters of the alphabet German knowledge on starting school - write some words German knowledge on starting school - write own name German knowledge on starting school - speak German

Item Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Aef0801	3,10	,94	,72						
Aef0802	2,58	1,07	,79						
Aef0803	1,87	1,05	,65						
Aef0804	3,00	,88	,75						
Aef0805	2,65	1,00	,75						
Aef0807	3,78	,58	,41						
	Cronbach's $\alpha = 0.87$ $\bar{x} = 16,99$ SD = 4.39 min = 1, max = 4 N = 3469			Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =		
The following items were excluded from the scaling due to insufficient discrimination (< .3):									
	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Aef0806	3,79	0,57	0,20						
	min = 1, max = 4 N = 3461			min = , max = N =			min = , max = N =		

1.3.4 Report Grades

Report Grade – 2nd Half-Term: German Overall

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Anotdt Bnotdt Cnotdt
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade German overall E4 Grade German overall E5 Grade German overall E6
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 CnotdtZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 Grade German overall E6 imp
Data source:	Student records	
Notes:	The following are each grades at the end of the school year. Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: German Oral

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Anotdmdl Bnotdmdl Cnotdmdl
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade German oral E4 Grade German oral E5 Grade German oral E6
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 CnotdmlZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 Grade German oral E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: German Spelling

Variable name:	ELEMENT 4:	Anotrs
	ELEMENT 5:	Bnotrs
	ELEMENT 6:	Cnotrs
Variable label:	ELEMENT 4:	Grade German spelling E4
	ELEMENT 5:	Grade German spelling E5
	ELEMENT 6:	Grade German spelling E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnotrsZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade German spelling E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: German Text Writing

Variable name:	ELEMENT 4:	AnottXt
	ELEMENT 5:	BnottXt
	ELEMENT 6:	CnottXt
Variable label:	ELEMENT 4:	Grade German text writing E4
	ELEMENT 5:	Grade German text writing E5
	ELEMENT 6:	Grade German text writing E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnottXtZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade German text writing E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers .	

Report Grade – 2nd Half-Term: German Reading

Variable name:	ELEMENT 4:	Anotdles
	ELEMENT 5:	Bnotdles
	ELEMENT 6:	Cnotdles
Variable label:	ELEMENT 4:	Grade German reading E4
	ELEMENT 5:	Grade German reading E5
	ELEMENT 6:	Grade German reading E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnotlesZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade German reading E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers	

Report Grade – 2nd Half-Term: Mathematics

Variable name:	ELEMENT 4:	Anotma
	ELEMENT 5:	Bnotma
	ELEMENT 6:	Cnotma
Variable label:	ELEMENT 4:	Grade mathematics E4
	ELEMENT 5:	Grade mathematics E5
	ELEMENT 6:	Grade mathematics E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnotmaZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade mathematics E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Art classes

Variable name:	ELEMENT 4:	Anotbk
	ELEMENT 5:	Bnotbk
	ELEMENT 6:	Cnotbk
Variable label:	ELEMENT 4:	Grade art E4
	ELEMENT 5:	Grade art E5
	ELEMENT 6:	Grade art E6
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Biology

Variable name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Cnotbio
Variable label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade biology E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnotbioZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade biology E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Musical education

Variable name:	ELEMENT 4:	Anotmu
	ELEMENT 5:	Bnotmu
	ELEMENT 6:	Cnotmu
Variable label:	ELEMENT 4:	Grade music E4
	ELEMENT 5:	Grade music E5
	ELEMENT 6:	Grade music E6
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Physical Education

Variable name:	ELEMENT 4:	Anotspo
	ELEMENT 5:	Bnotspo
	ELEMENT 6:	Cnotspo
Variable label:	ELEMENT 4:	Grade physical education E4
	ELEMENT 5:	Grade physical education E5
	ELEMENT 6:	Grade physical education E6
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Social Studies

Variable name:	ELEMENT 4:	Anotsk
	ELEMENT 5:	
	ELEMENT 6:	
Variable label:	ELEMENT 4:	Grade social studies E4
	ELEMENT 5:	
	ELEMENT 6:	
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers	

Report Grade – 2nd Half-Term: Geography

Variable name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Cnotek
Variable label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade geography E6
Imputation name:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	CnotekZ
Imputation label:	ELEMENT 4:	
	ELEMENT 5:	
	ELEMENT 6:	Grade geography E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: History

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cnotge
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade history E6
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CnotgeZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade history E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: 1st Foreign Language

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cnot1fs
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade 1st foreign language E6
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cnot1fsZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade 1st foreign language E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: 2nd Foreign Language

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cnot2fs
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade 2nd foreign language E6
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cnot2fsZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Grade 2nd foreign language E6 imp
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers.	

Report Grade – 2nd Half-Term: Mean Grade

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Anotds
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Mean grade year 4
Data source:	Student records	
Notes:	Grades from 1 ('very good') to 6 ('fail') in integers	

1.3.5 Educational Aspirations

Intended School-Leaving Qualification (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0101
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	What school-leaving qualification should child achieve?
Data source:	Parent questionnaire	
Coding:	Value	Value label
	1	Lower secondary school-leaving certificate
	2	Extended lower secondary school-leaving certificate
	3	Intermediate secondary school-leaving certificate
	4	Abitur (university entry qualification)
	5	Not yet certain

Item Analysis

Variable	1	2	3	4	5	N
Cef0101	1,1	1,9	16,2	74,2	6,6	2439

Attempted Enrolment at 10-Plus Grammar School (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0201
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Did you try to enrol your child at a grammar school at the end of grade 4?
Data source:	Parent questionnaire	
Notes:	Only to be answered by parents of primary school students.	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Cef0201	83,6	16,4	4013

Type of School from Grade 7 (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0202
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Which school will child attend from grade 7?
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0202Z
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	School attended from grade 7. E6 imp
Data source:	Parent questionnaire	
Notes:	Only to be answered by parents of primary school students.	
Coding:	Value	Value label
	1	Lower secondary school
	2	Intermediate secondary school
	3	Grammar school
	4	Comprehensive without upper school
	5	Comprehensive with upper school

Item Analysis

Variable	1	2	3	4	5	N
Cef0202	4,9	19,3	48,8	4,1	23,0	2901
Cef0202Z	3,7	17,3	56,2	3,0	19,9	4926

Type of School from Grade 7: Grammar School (Parent Statements)

Variable name: ELEMENT 4:
ELEMENT 5:
ELEMENT 6: CprGY

Variable label: ELEMENT 4:
ELEMENT 5:
ELEMENT 6: Grammar school attendance from grade 7

Data source: Parent questionnaire

Notes: Dummy variable for *Cef0202Z*

Coding: Value Value label
0 Other type of school
1 Grammar school

Item Analysis

Variable	0	1	N
CprGY	43,8	56,2	4926

Type of School from Grade 7 (Primary School Recommendation)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cprgse
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Primary school recommendation
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CprgseZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Primary school recommendation imp
Data source:	Student records	
Coding:	Value	Value label
	1	Lower secondary school
	2	Intermediate secondary school
	3	Grammar school

Item Analysis

Variable	1	2	3	N
Cprgse	16,1	38,3	45,6	3027
CprgseZ	13,9	31,5	54,6	4926

Type of School from Grade 7: Grammar School (Primary School Recommendation)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cpregy
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Recommendation for grammar school end of grade 6
Notes:	Dummy variable for <i>CprgseZ</i>	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Cpregy	45,40	54,60	4926

1.4 Motivational Attitudes Related to School and Teaching

1.4.1 School Climate

School Satisfaction

Scale name:	ELEMENT 4:	AskaszN
	ELEMENT 5:	BskaszN
	ELEMENT 6:	
Scale label:	ELEMENT 4:	School satisfaction E4 new
	ELEMENT 5:	School satisfaction E5 new
	ELEMENT 6:	
Data source:	Student questionnaire	
Number of items:	ELEMENT 4:	6
	ELEMENT 5:	14
	ELEMENT 6:	
Notes:	<p>High values represent a high level of school satisfaction. Items whose polarity is to be reversed for scaling are marked with a *.</p> <p>No scaling was developed for all items in ELEMENT 6 due to insufficient discrimination ($< .3$) likely to have arisen as a result of semantic discrepancies in the item wording.</p>	
Coding:	Asf1001 – Asf1006	Bsf2001 – Bsf2014, Csf0801 – Csf0804
	Value Value label	Value Value label
	1 Strongly agree	1 Fully agree
	2 Partly agree	2 Partly agree
	3 Partly disagree	3 Partly disagree
	4 Fully disagree	4 Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4:	Asf1001 – Asf1006
	ELEMENT 5:	Bsf2001 – Bsf2014,
	ELEMENT 6:	Csf0801 – Csf0804
Variable label:	Asf1001*	I like going to school.
	Asf1002*	I feel happy at our school.
	Asf1003*	Our school has a friendly atmosphere.
	Asf1004*	Learning is fun at our school.
	Asf1005*	You can count on support at our school.
	Asf1006*	Our school offers great extra-curricular activities.
	Bsf2001*	I like going to school.
	Bsf2002*	I feel happy in our school.
	Bsf2003*	Our school has a friendly atmosphere.
	Bsf2004*	Learning is fun at our school.
	Bsf2005*	You can count on support at our school.
	Bsf2006*	Our school offers great extra-curricular activities.
	Bsf2007	There are many things I don't like at our school.
	Bsf2008*	I am learning to concentrate on work and not let myself be distracted much.
	Bsf2009*	In lessons, I get the help I need.
	Bsf2010*	I am very happy in my class.

Bsf2011	I am bored at school.
Bsf2012	When I just think of the school in the morning, it often puts me in a bad mood.
Bsf2013	In my class, hardly anyone is interested when I have a problem.
Bsf2014*	At school, I feel that I am important.
The following items were excluded from the scale analysis:	
Csf0801	You cannot count on support at our school.
Csf0802*	At school, I am made to feel that I am important.
Csf0803	At our school, everyone has to fight for themselves.
Csf0804*	There are lots of great things to do outside school.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1001*	3,28	,83	,61	Bsf2001*	3,14	,91	,62				
Asf1002*	3,45	,78	,67	Bsf2002*	3,40	,80	,70				
Asf1003*	3,48	,77	,62	Bsf2003*	3,42	,80	,63				
Asf1004*	3,35	,79	,70	Bsf2004*	3,16	,85	,70				
Asf1005*	3,44	,80	,50	Bsf2005*	3,41	,73	,52				
Asf1006*	3,21	,98	,42	Bsf2006*	3,28	,87	,40				
				Bsf2007	2,43	,96	,42				
				Bsf2008*	3,28	,77	,38				
				Bsf2009*	3,20	,87	,42				
				Bsf2010*	3,41	,82	,60				
				Bsf2011	2,86	,96	,50				
				Bsf2012	2,82	1,025	,538				
				Bsf2013	2,90	1,006	,431				
				Bsf2014*	2,49	,933	,294				
Cronbach's $\alpha = 0.82$ $\bar{x} = 20,20$ SD = 3.58 min = 1, max = 4 N = 3744				Cronbach's $\alpha = 0.86$ $\bar{x} = 43,20$ SD = 7.31 min = 1, max = 4 N = 3693				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
								Csf0801	2,96	1,04	,24
								Csf0802*	2,76	,91	,24
								Csf0803	2,96	,96	,31
								Csf0804*	2,96	,98	,22
min = , max = N =				min = , max = N =				min = 1, max = 4 N = 3822			

Classroom Cohesion

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CskakzN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Classroom cohesion new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	8
Notes:	High values represent a high level of classroom cohesion. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf1001 – Csf1008
Variable label:	Csf1001 Csf1002 Csf1003 Csf1004 Csf1005 Csf1006 Csf1007* Csf1008* The following items were excluded from the scale analysis: Csf1009 Csf1010	Some students don't help others because they want to show off their own knowledge. Fellow students don't allow each other any success. Some students want to be always better than others. Some students don't tell others the answers because they want to answer the question themselves. Fellow students argue about whose work is better. Many students are only interested in knowing more than others. If someone is stuck, they can rely on fellow students. We give each other tips and advice. I sometimes say nothing, although I am right. I can't assert myself as well as others.

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Csf1001							2,48	1,00	,62
Csf1002							2,64	,97	,65
Csf1003							2,04	,93	,61
Csf1004							2,39	,98	,54
Csf1005							2,94	,99	,59
Csf1006							2,74	,98	,65
Csf1007*							3,16	,84	,42
Csf1008*							3,24	,81	,35
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.83 \bar{x} = 21,63 SD = 5.09 min = 1, max = 4 N = 3788		
The following items were excluded from the scaling due to insufficient discrimination (< .3):									
	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}	\bar{x}	SD	r _{it}
Csf1009							2,22	,97	,26
Csf1010							2,78	1,07	,24
	min = , max = N =			min = , max = N =			min = 1, max = 4 N = 3741		

Performance-based school anxiety

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskaasN BskaasN																								
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	school anxiety E4 new school anxiety E5 new																								
Data source:	Student questionnaire																									
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	5 9																								
Notes:	High values represent a positive performance-based school anxiety. Items whose polarity is to be reversed for scaling are marked with a *.																									
Coding:	<table><tr><th colspan="2">Asf1301 – Asf1305</th><th colspan="2">Bsf2101 – Bsf2110</th></tr><tr><th>Value</th><th>Value label</th><th>Value</th><th>Value label</th></tr><tr><td>1</td><td>Strongly agree</td><td>1</td><td>Fully agree</td></tr><tr><td>2</td><td>Partly agree</td><td>2</td><td>Partly agree</td></tr><tr><td>3</td><td>Partly disagree</td><td>3</td><td>Partly disagree</td></tr><tr><td>4</td><td>Fully disagree</td><td>4</td><td>Fully disagree</td></tr></table>		Asf1301 – Asf1305		Bsf2101 – Bsf2110		Value	Value label	Value	Value label	1	Strongly agree	1	Fully agree	2	Partly agree	2	Partly agree	3	Partly disagree	3	Partly disagree	4	Fully disagree	4	Fully disagree
Asf1301 – Asf1305		Bsf2101 – Bsf2110																								
Value	Value label	Value	Value label																							
1	Strongly agree	1	Fully agree																							
2	Partly agree	2	Partly agree																							
3	Partly disagree	3	Partly disagree																							
4	Fully disagree	4	Fully disagree																							
Scaling:	Averaging																									
Items																										
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1301 – Asf1305 Bsf2101 – Bsf2107, Bsf2109, Bsf2110																								
Variable label:	Asf1301 Asf1302 Asf1303 Asf1304 Asf1305 Bsf2101 Bsf2102 Bsf2103 Bsf2104 Bsf2105 Bsf2106 Bsf2107 Bsf2109 Bsf2110 The following items were excluded from the scale analysis: Bsf2108*	When the teacher announces a test, I'm scared. I worry about whether I will move up to the next year. When I lie in bed at night, I sometimes worry about how well I will do in classes. When the teacher says that we must write something from dictation, I'm scared. I sometimes worry on my way to school about whether the teacher will check how good I am at school. When a teacher announces a test, I'm scared. I worry about whether I will move up to grade 6. When I lie in bed at night, I sometimes worry about how well I will do in classes. I rarely get involved in lessons because I am afraid of saying something incorrect. I often think I'm not as clever as the others. When a teacher asks me something by surprise, I can't even answer the simplest questions. The others often have better ideas than I do. Even on tasks I think I can complete, I am afraid of failure. If I don't understand a problem straight away, I get nervous. I enjoy working on slightly more difficult problems.																								

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1301	2,80	1,04	,66	Bsf2101	2,44	,99	,62				
Asf1302	2,85	1,18	,61	Bsf2102	2,81	1,16	,65				
Asf1303	2,69	1,12	,64	Bsf2103	2,49	1,09	,64				
Asf1304	3,00	1,04	,67	Bsf2104	2,77	1,07	,65				
Asf1305	2,95	1,06	,65	Bsf2105	2,59	1,06	,67				
				Bsf2106	2,91	1,01	,61				
				Bsf2107	2,54	,97	,65				
				Bsf2109	2,66	1,07	,71				
				Bsf2110	2,87	1,02	,66				
Cronbach's $\alpha = 0.84$ $\bar{x} = 14,29$ SD = 4.26 min = 1, max = 4 N = 3814				Cronbach's $\alpha = 0.89$ $\bar{x} = 24,08$ SD = 6.93 min = 1, max = 4 N = 3787				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2108*	2,87	0,97	-0,10				
min = , max = N =				min = 1, max = 4 N = 3953				min = , max = N =			

1.4.2 Self-Concept

Social Self-Concept

Scale name:	ELEMENT 4:	AskassN
	ELEMENT 5:	BskassN
	ELEMENT 6:	CskassN
Scale label:	ELEMENT 4:	Social self-concept E4 new
	ELEMENT 5:	Social self-concept E5 new
	ELEMENT 6:	Social self-concept E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4:	7
	ELEMENT 5:	8
	ELEMENT 6:	12
Notes:	High values represent a positive social self-concept. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Asf1201 – Asf1208	Bsf1601 – Bsf1608 Csf0701 – Csf0713
	Value	Value label
	1	Strongly agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
	Value	Value label
	1	Fully agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4:	Asf1202 – Asf1208
	ELEMENT 5:	Bsf1601 – Bsf1608
	ELEMENT 6:	Csf0701 – Csf0708, Csf0710 – Csf0713
Variable label:	Asf1202*	I am popular.
	Asf1203*	Others come to me with their problems.
	Asf1204*	At school, I am made to feel that I am important.
	Asf1205*	I have really good friends in my class.
	Asf1206*	My fellow students think a lot of me.
	Asf1207*	My fellow students like me the way I am.
	Asf1208*	The others enjoy working with me in groups.
	Bsf1601	It's hard to find friends at our school.
	Bsf1602*	I am popular.
	Bsf1603*	Others come to me with their problems.
	Bsf1604*	I have really good friends in my class.
	Bsf1605*	My fellow students think a lot of me.
	Bsf1606*	My fellow students like me the way I am.
	Bsf1607*	The others enjoy working with me in groups.
	Bsf1608	I sometimes feel like an outsider in my class.
	Csf0701	It's hard to find friends at our school.
	Csf0702*	When you have difficulties, fellow students help.
	Csf0703*	I am popular.
	Csf0704*	Others come to me with their problems.
	Csf0705*	I have good friends in my class.
	Csf0706*	My fellow students think a lot of me.
	Csf0707*	My fellow students like me the way I am.
	Csf0708	In our school, you shouldn't be different from the others.

Csf0710	I am often left out when others do something together in the breaks.
Csf0711	I can do whatever I life - but I'm still not popular with my classmates.
Csf0712*	Others enjoy working with me in groups.
Csf0713	I sometimes feel like an outsider in my class.
The following items were excluded from the scale analysis:	
Asf1201	It's hard to find friends at our school.
Csf0709	A student who behaves incorrectly is ignored for a while.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1202*	2,50	,96	,60	Bsf1601	3,34	,87	,47	Csf0701	3,34	,81	,54
Asf1203*	2,10	,94	,51	Bsf1602*	2,68	,89	,62	Csf0702*	3,13	,81	,36
Asf1204*	2,35	,99	,54	Bsf1603*	2,30	,92	,38	Csf0703*	2,83	,87	,58
Asf1205*	3,61	,76	,43	Bsf1604*	3,67	,70	,55	Csf0704*	2,48	,92	,39
Asf1206*	2,59	,89	,70	Bsf1605*	2,77	,84	,69	Csf0705*	3,65	,71	,56
Asf1207*	3,18	,89	,63	Bsf1606*	3,34	,80	,66	Csf0706*	2,90	,82	,63
Asf1208*	2,97	,92	,66	Bsf1607*	3,09	,86	,64	Csf0707*	3,38	,78	,66
				Bsf1608	3,06	1,07	,51	Csf0708	2,94	1,00	,26
								Csf0710	3,27	,91	,56
								Csf0711	3,44	,86	,66
								Csf0712*	3,21	,81	,58
								Csf0713	3,23	1,01	,63
Cronbach's $\alpha = 0.83$ $\bar{x} = 19,30$ SD = 4.48 min = 1, max = 4 N = 3401				Cronbach's $\alpha = 0.84$ $\bar{x} = 24,25$ SD = 4.73 min = 1, max = 4 N = 3705				Cronbach's $\alpha = 0.86$ $\bar{x} = 37,78$ SD = 6.41 min = 1, max = 4 N = 3464			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1201	3,19	1,02	0,21					Csf0709	2,66	0,98	0,28
min = 1, max = 4 N = 3889				min = , max = N =				min = 1, max = 4 N = 3925			

Subject-Related Ability Self-Concept: Mathematics

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskafmN CskafmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Subject-related ability self-concept: mathematics E5 new Subject-related ability self-concept: mathematics E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 6 7
Notes:	High values represent a high mathematics ability self-concept. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2210, Bsf2212 – Bsf2216 Csf1201 – Csf1204, Csf1207 – Csf1209
Variable label:	Bsf2210* Bsf2212* Bsf2213* Bsf2214* Bsf2215* Bsf2216 Csf1201* Csf1202 Csf1203* Csf1204 Csf1207 Csf1208* Csf1209* The following items were excluded from the scaling: Bsf2211* Bsf2217 Csf1205* Csf1206*	I can use what I learn in maths for other subjects. I have to be good at maths to be happy with myself. I enjoy maths when I discover a new way to solve a task or problem. Maths is one of my favourite subjects. Even on difficult mathematical word problems, I find the right solution. I find maths very difficult. Maths is one of my favourite subjects. I'm not as good as others at maths. I enjoy working on slightly more difficult problems. I often think I'm not as clever as the others in maths. Although I make an effort in maths, I find it harder than my fellow students. Maths is one of my best subjects. I get good grades in maths. The following items were excluded from the scaling: I have to be good at maths so that my parents are proud of me. Although I really make an effort in maths, I find it harder than many of my fellow students. I have to be good at maths so that my parents are proud of me. I have to be good at maths to be happy with myself.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2210*	3,05	,88	,44	Csf1201*	2,70	1,12	,62
				Bsf2212*	3,31	,88	,34	Csf1202	2,65	1,04	,67
				Bsf2213*	3,29	,91	,56	Csf1203*	2,89	1,00	,40
				Bsf2214*	2,73	1,14	,62	Csf1204	2,73	1,06	,56
				Bsf2215*	2,81	,88	,55	Csf1207	2,85	1,08	,68
				Bsf2216	2,75	1,01	,28	Csf1208*	2,65	1,11	,76
								Csf1209*	2,94	,92	,73
Cronbach's α =				Cronbach's α = 0.73				Cronbach's α = 0.86			
\bar{x} =				\bar{x} = 17,95				\bar{x} = 19,40			
SD =				SD = 3.72				SD = 5.42			
min = , max =				min = 1, max = 4				min = 1, max = 4			
N =				N = 3783				N = 3794			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2211*	2,74	1,10	,15	Csf1205*	2,30	1,13	-,08
				Bsf2217	2,84	1,05	,29	Csf1206*	3,15	,93	,19
min = , max =				min = 1, max = 4				min = 1, max = 4			
N =				N = 3749				N = 3751			

Subject-Related Ability Self-Concept: German

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskafdN CskafdN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Subject-related ability self-concept: German E5 new Subject-related ability self-concept: German E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 7 6
Notes:	High values represent a high German ability self-concept. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2801 – Bsf2804, Bsf2806 – Bsf2808 Csf1501 – Csf1503, Csf1506 – Csf1508
Variable label:	Bsf2801* Bsf2802* Bsf2803 Bsf2804* Bsf2806* Bsf2807* Bsf2808* Csf1501* Csf1502 Csf1503 Csf1506 Csf1507* Csf1508* The following items were excluded from the scaling: Bsf2805* Bsf2809 Bsf2810 Csf1504* Csf1505*	It's important to me to know a lot in German. I always look forward to German lessons. German is boring. I can use what I learn in German for other subjects. I have to be good at German to be happy with myself. German is one of my favourite subjects. I even manage difficult texts. German is one of my favourite subjects. I'm not as good as others at German. I often think I'm not as clever as the others in German. Although I make an effort in German, I find it harder than my fellow students. German is one of my best subjects. I get good grades in German. I have to be good at German so that my parents are proud of me. I find German very difficult. Although I really make an effort in German, I find it harder than many of my fellow students. I have to be good at German so that my parents are proud of me. I have to be good at German to be happy with myself.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2801*	3,52	,69	,56	Csf1501*	2,58	1,02	,43
				Bsf2802*	2,86	1,00	,72	Csf1502	2,74	1,00	,63
				Bsf2803	2,76	1,07	,35	Csf1503	2,88	1,01	,59
				Bsf2804*	3,30	,84	,47	Csf1506	2,88	1,04	,64
				Bsf2806*	3,31	,89	,46	Csf1507*	2,68	,99	,66
				Bsf2807*	2,64	1,09	,65	Csf1508*	2,96	,87	,67
				Bsf2808*	3,12	,82	,40				
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0.79 \bar{x} = 21,52 SD = 5.17 min = 1, max = 4 N = 3330				Cronbach's α = 0.80 \bar{x} = 16,71 SD = 4.35 min = 1, max = 4 N = 3744			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2805*	2,77	1,11	,12	Csf1504*	2,25	1,13	-,12
				Bsf2809	2,88	1,01	,22	Csf1505*	3,04	1,01	,21
				Bsf2810	2,82	1,07	,16				
min = , max = N =				min = 1, max = 4 N = 3272				min = 1, max = 4 N = 3706			

Subject-Related Ability Self-Concept: Reading (Single-Item Variables)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0608 – Bsf0610 Csf0308, Csf0309, Csf0311
Variable label:	Bsf0608 Bsf0609 Bsf0610 Csf0308 Csf0309 Csf0311	I find reading very easy. I find reading in a language other than German easy. I can't read as well as my fellow students. I find reading very easy. I find reading in a language other than German easy. I can't read as well as my fellow students.
Data source:	Student questionnaire	
Notes:	The variables do not form an independent scale on account of insufficient reliability (ELEMENT 5 $\alpha = 0.44$; ELEMENT 6 $\alpha = 0.54$); as a result, single-item variables are reported.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree

Item Analysis

Variable	1	2	3	4	N
Bsf0608	60,6	29,1	7,3	3,0	4069
Bsf0609	15,0	25,8	25,9	33,3	4084
Bsf0610	12,8	25,9	23,0	38,4	4086
Csf0308	48,5	23,0	6,3	2,8	3971
Csf0309	15,5	27,0	23,1	14,8	3965
Csf0311	8,9	21,4	26,1	43,6	3980

Expectations of Self-Efficacy

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskaswN BskaswN																								
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Self-efficacy expectations E4 new Self-efficacy expectations E5 new																								
Data source:	Student questionnaire																									
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	9 16																								
Notes:	High values represent high expectations.of self-efficacy. Items whose polarity is to be reversed for scaling are marked with a *.																									
Coding:	<table><tr><td colspan="2">Asf1101 – Asf1109</td><td colspan="2">Bsf1901 – Bsf1917</td></tr><tr><td>Value</td><td>Value label</td><td>Value</td><td>Value label</td></tr><tr><td>1</td><td>Strongly agree</td><td>1</td><td>Fully agree</td></tr><tr><td>2</td><td>Partly agree</td><td>2</td><td>Partly agree</td></tr><tr><td>3</td><td>Partly disagree</td><td>3</td><td>Partly disagree</td></tr><tr><td>4</td><td>Fully disagree</td><td>4</td><td>Fully disagree</td></tr></table>		Asf1101 – Asf1109		Bsf1901 – Bsf1917		Value	Value label	Value	Value label	1	Strongly agree	1	Fully agree	2	Partly agree	2	Partly agree	3	Partly disagree	3	Partly disagree	4	Fully disagree	4	Fully disagree
Asf1101 – Asf1109		Bsf1901 – Bsf1917																								
Value	Value label	Value	Value label																							
1	Strongly agree	1	Fully agree																							
2	Partly agree	2	Partly agree																							
3	Partly disagree	3	Partly disagree																							
4	Fully disagree	4	Fully disagree																							
Items																										
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1101 – Asf1109 Bsf1901 – Bsf1909, Bsf1911 – Bsf1917																								
Variable label:	Asf1101* Asf1102* Asf1103* Asf1104* Asf1105* Asf1106* Asf1107* Asf1108* Asf1109* Bsf1901* Bsf1902* Bsf1903* Bsf1904* Bsf1905* Bsf1906* Bsf1907* Bsf1908* Bsf1909*	To be successful at school, it's important - to prepare the work well. To be successful at school, it's important - to always give your best. To be successful at school, it's important - to do homework regularly. To be successful at school, it's important - to play an active part in lessons. To be successful at school, it's important - to have a good memory to be able to remember everything. To be successful at school, it's important - to do lots of written assignments. To be successful at school, it's important - to try and find your own solutions. To be successful at school, it's important - to be clever enough to understand everything quickly. To be successful at school, it's important - to enjoy going to school. To be successful, it's important - to prepare the work well. To be successful, it's important - to always give your best. To be successful, it's important - to do homework regularly. To be successful, it's important - to play an active part in lessons. To be successful, it's important - to have a good memory to be able to remember everything. To be successful, it's important - to do lots of written assignments. To be successful, it's important - to try and find your own solutions. To be successful, it's important - to be clever enough to understand everything quickly. To be successful, it's important - to enjoy going to school.																								

Bsf1911*	When I make an effort at school, I always produce good work.
Bsf1912*	First of all, I work out what needs to be learnt.
Bsf1913*	When learning, I try to find out what I haven't yet fully understood.
Bsf1914*	When I concentrate, I can learn everything.
Bsf1915*	I repeat all the important things to myself again and again.
Bsf1916*	I think before doing something.
Bsf1917*	I always work very carefully, even if this means it takes a bit longer.
The following items were excluded from the scaling:	
Bsf1910*	To be successful, it's important - to pretend to like the teacher.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1101*	3,74	,55	,53	Bsf1901*	3,75	,56	,51				
Asf1102*	3,87	,41	,53	Bsf1902*	3,86	,44	,56				
Asf1103*	3,83	,51	,53	Bsf1903*	3,84	,48	,51				
Asf1104*	3,79	,51	,61	Bsf1904*	3,80	,50	,56				
Asf1105*	3,55	,65	,57	Bsf1905*	3,50	,68	,53				
Asf1106*	3,44	,71	,55	Bsf1906*	3,42	,72	,56				
Asf1107*	3,66	,61	,52	Bsf1907*	3,67	,60	,51				
Asf1108*	3,44	,72	,49	Bsf1908*	3,28	,80	,48				
Asf1109*	3,42	,86	,42	Bsf1909*	3,31	,90	,49				
				Bsf1911*	3,35	,72	,45				
				Bsf1912*	3,49	,71	,61				
				Bsf1913*	3,51	,72	,54				
				Bsf1914*	3,55	,67	,51				
				Bsf1915*	3,28	,82	,53				
				Bsf1916*	3,44	,72	,51				
				Bsf1917*	3,06	,84	,47				
Cronbach's $\alpha = 0.83$ $\bar{x} = 32,75$ SD = 3.56 min = 1, max = 4 N = 3770				Cronbach's $\alpha = 0.88$ $\bar{x} = 56,10$ SD = 6.47 min = 1, max = 4 N = 3836				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf1910*	2,38	1,12	,13				
min = , max = N =				min = 1, max = 4 N = 3790				min = , max = N =			

Rating of Personal Ability

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskalvN BskalvN																								
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Rating of personal ability E4 new Rating of personal ability E5 new																								
Data source:	Student questionnaire																									
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	6 10																								
Notes:	High values represent a positive rating of personal ability. Items whose polarity is to be reversed for scaling are marked with a *.																									
Coding:	<table><tr><th colspan="2">Asf1401 – Asf1407</th><th colspan="2">Bsf1801 – Bsf1812</th></tr><tr><th>Value</th><th>Value label</th><th>Value</th><th>Value label</th></tr><tr><td>1</td><td>Strongly agree</td><td>1</td><td>Fully agree</td></tr><tr><td>2</td><td>Partly agree</td><td>2</td><td>Partly agree</td></tr><tr><td>3</td><td>Partly disagree</td><td>3</td><td>Partly disagree</td></tr><tr><td>4</td><td>Fully disagree</td><td>4</td><td>Fully disagree</td></tr></table>		Asf1401 – Asf1407		Bsf1801 – Bsf1812		Value	Value label	Value	Value label	1	Strongly agree	1	Fully agree	2	Partly agree	2	Partly agree	3	Partly disagree	3	Partly disagree	4	Fully disagree	4	Fully disagree
Asf1401 – Asf1407		Bsf1801 – Bsf1812																								
Value	Value label	Value	Value label																							
1	Strongly agree	1	Fully agree																							
2	Partly agree	2	Partly agree																							
3	Partly disagree	3	Partly disagree																							
4	Fully disagree	4	Fully disagree																							
Scaling:	Averaging																									
Items																										
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1401 – Asf1405, Asf1407 Bsf1801 – Bsf1806, Bsf1808, Bsf1810 – Bsf1812																								
Variable label:	Asf1401* Asf1402 Asf1403 Asf1404 Asf1405 Asf1403 ³ Asf1409* Bsf1801* Bsf1802 Bsf1803 Bsf1804 Bsf1805 Bsf1806 Bsf1808* Bsf1810 Bsf1811 Bsf1812* The following items were excluded from the scaling: Asf1406* Asf1408* Bsf1807* Bsf1809*	My work is just as good as that of the others. There are many things I just can't learn. I just can't get some things into my head. In comparison with others, I'm just not very talented. Learning is not my thing. Whether I understand something is too often just a matter of luck. The teachers are satisfied with me. My work is just as good as that of the others. There are many things I just can't learn. I just can't get some things into my head. In comparison with others, I'm just not very talented. Learning is not my thing. Whether I understand something is often just a matter of luck. The teachers are satisfied with me. I'm just not very cut out for school. Although I prepared for a test, I'm always one of the less good students. I think I'm successful. When I make enough effort, I can solve all tasks correctly. I know my strengths exactly. I know my strengths exactly. The teachers help me to give my best.																								

³ Also in scale German: causal attribution, variable bsf2907

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1401*	3,11	,82	,35	Bsfl801*	3,10	,75	,49				
Asf1402	2,76	,99	,59	Bsfl802	2,65	,95	,62				
Asf1403	2,57	1,02	,55	Bsfl803	2,47	,98	,61				
Asf1404	2,89	1,00	,59	Bsfl804	2,87	,95	,67				
Asf1405	3,10	1,03	,46	Bsfl805	2,95	1,00	,53				
Asf1403	2,91	1,07	,50	Bsfl806	3,05	,99	,60				
Asf1409*	3,16	,76	,29	Bsfl808*	3,13	,72	,47				
				Bsfl810	3,24	,92	,65				
				Bsfl811	2,77	1,02	,61				
				Bsfl812*	2,82	,89	,51				
Cronbach's $\alpha = 0.75$ $\bar{x} = 20,51$ SD = 4.31 min = 1, max = 4 N = 3505				Cronbach's $\alpha = 0.86$ $\bar{x} = 29,04$ SD = 6.18 min = 1, max = 4 N = 3683				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Asf1406*	3,55	,73	,19	Bsfl807*	3,54	,69	,22				
Asf1408*	3,42	,82	,21	Bsfl809*	3,16	,87	,02				
min = 1, max = 4 N = 3460				min = 1, max = 4 N = 3631				min = , max = N =			

Interdisciplinary Competency Acquisition at School

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CskakeN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Interdisciplinary competency acquisition at school new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	5
Notes:	High values represent a high level of interdisciplinary competency acquisition at school. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf0901 – Csf0905
Variable label:	Csf0901* Csf0902* Csf0903* Csf0904* Csf0905*	I have learnt to concentrate on work and not let myself be distracted much. I have learnt to get along with others. I have learnt to help others. I have learnt to accept responsibility for certain tasks. I have learnt to plan and complete my tasks independently.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
								Csf0901*	3,25	,78	,50
								Csf0902*	3,31	,82	,59
								Csf0903*	3,29	,85	,65
								Csf0904*	3,39	,78	,62
								Csf0905*	3,40	,77	,54
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0.80 \bar{x} = 16,64 SD = 8.82 min = 1, max = 4 N = 3905			

1.4.3 Motivation to Learning and Achievement

Motives for Achievement

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf1701 – Bsf1705
Variable label:	Bsf1701 Bsf1702 Bsf1703 Bsf1704 Bsf1705	I do homework because I want to understand the material. I do homework because it's important for me that I do it. I make an effort at school, because I would like to be good. I actively get involved in lessons because it's important for me to try. I make an effort at school because it's important for me to strive for good grades.
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf1701				1,62	,82	,53			
Bsf1702				1,35	,69	,60			
Bsf1703				1,34	,61	,62			
Bsf1704				1,44	,69	,59			
Bsf1705				1,32	,61	,60			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.81 \bar{x} = 7,07 SD = 2.56 min = 1, max = 4 N = 4052			Cronbach's α = \bar{x} = SD = min = , max = N =		

Motives for Reading

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0401 – Bsf0410
Variable label:	Bsf0401 Bsf0402 Bsf0403 Bsf0404 Bsf0405 Bsf0406 Bsf0407 Bsf0408 Bsf0409 Bsf0410	I read because - in life it's important to be able to read well. I read because - I can find out something about other people. I read because - I want my parents to be proud of me. I read because - I can talk to others about what I've read. I read because - I can then have some peace and quiet alone. I read because - my parents think it's important for me to read a lot. I read because - I can then imagine exciting things. I read because - I can learn a lot from it. I read because - I enjoy reading stories. I read because - I have to read for school.
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf0401				1,46	,69	,47			
Bsf0402				1,83	,84	,53			
Bsf0403				2,46	1,14	,47			
Bsf0404				2,38	1,04	,49			
Bsf0405				2,03	1,06	,37			
Bsf0406				2,00	1,06	,49			
Bsf0407				1,64	,87	,40			
Bsf0408				1,58	,81	,59			
Bsf0409				1,69	,94	,28			
Bsf0410				2,21	1,05	,36			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.78 \bar{x} = 19,28 SD = 5.48 min = 1, max = 4 N = 3948			Cronbach's α = \bar{x} = SD = min = , max = N =		

External Causal Attribution: Mathematics

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaekmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	External causal attribution: mathematics new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	3
Notes:	High values represent a strong sense of external causal attribution in mathematics. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Always or almost always Sometimes Rarely Never
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2301, Bsf2304, Bsf2305
Variable label:	Bsf2301* Bsf2304* Bsf2305*	When I do badly in maths tests - the teacher didn't explain things well. When I do badly in maths tests - the teacher went through things too quickly. When I do badly in maths tests - the lessons were too difficult.

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf2301*				2,30	,93	,49			
Bsf2304*				2,37	,95	,63			
Bsf2305*				2,27	,95	,50			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.72 \bar{x} = 6,94 SD = 2.27 min = 1, max = 4 N = 3863			Cronbach's α = \bar{x} = SD = min = , max = N =		

Internal Causal Attribution: Mathematics

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaikmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Internal causal attribution: mathematics new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	6
Notes:	High values represent a strong sense of internal causal attribution in mathematics. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Always or almost always Sometimes Rarely Never
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2302, Bsf2303, Bsf2306, Bsf2307 – Bsf2309
Variable label:	Bsf2302* Bsf2303* Bsf2306* Bsf2307* Bsf2308* Bsf2309*	When I do badly in maths tests - I didn't study well. When I do badly in maths tests - I didn't understand the lessons well. When I do badly in maths tests - I didn't make enough effort. When I do badly in maths tests - I let myself be distracted too easily. When I do badly in maths tests - I just wasn't on form. When I do badly in maths tests - my thoughts were far away.

Scale Analysis

Variable	ELEMENT 4			ELEMENT 5			ELEMENT 6		
	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf2302*				2,74	,880	,575			
Bsf2303*				2,64	,902	,559			
Bsf2306*				2,63	,959	,661			
Bsf2307*				2,59	,977	,657			
Bsf2308*				2,71	,908	,531			
Bsf2309*				2,57	1,015	,603			

	Cronbach's α = \bar{x} = SD = min = , max = N =	Cronbach's α = 0.83 \bar{x} = 15,89 SD = 4.14 min = 1, max = 4 N = 3793	Cronbach's α = \bar{x} = SD = min = , max = N =
--	--	--	--

External Causal Attribution: German

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaekdN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	External causal attribution: German new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	4
Notes:	High values represent a strong sense of external causal attribution in German. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Always or almost always Sometimes Rarely Never
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2901, Bsf2904, Bsf2905, Bsf2907
Variable label:	Bsf2901* Bsf2904* Bsf2905* Bsf2907 ⁴ *	When I do badly in German tests - the teacher didn't explain things well. When I do badly in German tests - the teacher went through things too quickly. When I do badly in German tests - the lessons were too difficult. Whether I understand something is too often just a matter of luck.

⁴ See also scale assessment of personal ability, variable Asf1407

Scale Analysis

Variable	ELEMENT 4			ELEMENT 5			ELEMENT 6		
	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf2901*				2,35	,98	,52			
Bsf2904*				2,31	,98	,65			
Bsf2905*				2,32	,98	,64			
Bsf2907*				2,14	1,06	,47			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.77 \bar{x} = SD = min = , max = N = 3355			Cronbach's α = \bar{x} = SD = min = , max = N =		

Internal Causal Attribution: German

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaikdN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Internal causal attribution: German new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	7
Notes:	High values represent a strong sense of internal causal attribution in German. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Always or almost always Sometimes Rarely Never
Recoded items:		
Reversed-polarity items:		
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2902, Bsf2903, Bsf2906, Bsf2908, Bsf2909 – Bsf2911
Variable label:	Bsf2902* Bsf2903* Bsf2906* Bsf2908* Bsf2909* Bsf2910* Bsf2911*	When I do badly in German tests - I didn't study well. When I do badly in German tests - I didn't understand the lessons well. When I do badly in German tests - I didn't make enough effort. When I do badly in German tests - I had a poor memory. When I do badly in German tests - I let myself be distracted too easily. When I do badly in German tests - I just wasn't on form. When I do badly in German tests - my thoughts were far away.

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf2902*				2,74	,93	,62			
Bsf2903*				2,61	,94	,64			
Bsf2906*				2,66	,97	,68			

Bsf2908*				2,32	1,02	,63			
Bsf2909*				2,58	,99	,70			
Bsf2910*				2,64	,96	,63			
Bsf2911*				2,56	1,04	,66			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.87 \bar{x} = 18,12 SD = 26.59 min = 1, max = 4 N = 3289			Cronbach's α = \bar{x} = SD = min = , max = N =		

1.4.4 Interests

Interest in Reading

Scale name:	ELEMENT 4:	AskalinN
	ELEMENT 5:	BskalinN
	ELEMENT 6:	CskalinN
Scale label:	ELEMENT 4:	Interest in reading E4 new
	ELEMENT 5:	Interest in reading E5 new
	ELEMENT 6:	Interest in reading E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4:	5
	ELEMENT 5:	7
	ELEMENT 6:	7
Notes:	High values represent high level of interest in reading. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Asf0901 – Asf0905	
	Bsf0601 – Bsf0607, Csf0301 – Csf0306, Csf0310	
	Value	Value label
	1	Strongly agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
	Value	Value label
	1	Fully agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4:	Asf0901 – Asf0905
	ELEMENT 5:	Bsf0601 – Bsf0607
	ELEMENT 6:	Csf0301 – Csf0306, Csf0310
Variable label:	Asf0901	I only read when I have to.
	Asf0902*	I like talking to other people about books.
	Asf0903*	I am happy when someone gives me a book.
	Asf0904	I think reading is boring.
	Asf0905*	I enjoy reading.
	Bsf0601*	I read outside of school because I enjoy it.
	Bsf0602	I only read when I have to.
	Bsf0603	I think reading is boring.
	Bsf0604*	I am happy when I get a new book to read.
	Bsf0605	I find reading too strenuous.
	Bsf0606	I prefer watching TV to reading.
	Bsf0607*	I like talking to other people about books.
	Csf0301*	I read outside of school because I enjoy it.
	Csf0302	I only read when I have to.
	Csf0303	I think reading is boring.
	Csf0304*	I am happy when I get a new book to read.
	Csf0305	I find reading too strenuous.
	Csf0306	I prefer watching TV to reading.
	Csf0310*	Reading is personally important to me.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf0901	3,08	1,13	,50	Bsf0601*	3,31	,93	,70	Csf0301*	3,27	,95	,79
Asf0902*	2,47	1,05	,40	Bsf0602	3,15	1,06	,66	Csf0302	3,17	1,03	,72
Asf0903*	3,49	,81	,57	Bsf0603	3,36	,98	,75	Csf0303	3,27	,99	,77
Asf0904	3,48	,92	,67	Bsf0604*	3,38	,90	,65	Csf0304*	3,21	,98	,74
Asf0905*	3,44	,89	,74	Bsf0605	3,49	,85	,60	Csf0305	3,53	,82	,56
				Bsf0606	2,58	1,05	,62	Csf0306	2,38	1,01	,60
								Csf0310*	3,05	,97	,65
Cronbach's $\alpha = 0.80$ $\bar{x} = 15,97$ SD = 3.55 min = 1, max = 4 N = 3821				Cronbach's $\alpha = 0.86$ $\bar{x} = 21,65$ SD = 4.99 min = 1, max = 4 N = 3910				Cronbach's $\alpha = 0.89$ $\bar{x} = 21,89$ SD = 5.25 min = 1, max = 4 N = 3791			

Subject Interest: Mathematics

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaimN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Subject interest mathematics new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	9
Notes:	High values represent a strong interest in the subject of mathematics. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:		
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2201 – Bsf2209
Variable label:	Bsf2201* Bsf2202* Bsf2203* Bsf2204* Bsf2205* Bsf2206* Bsf2207* Bsf2208* Bsf2209	I like doing calculations with large numbers. I enjoy drawing geometric figures with the set square, ruler, and compass. I enjoy thinking about how I can calculate something in the cleverest way. I like working out mathematical word problems. I enjoy solving brain-teasers and puzzles in newspapers and magazines. It's important to me to know a lot in maths. I always look forward to maths lessons. I enjoy puzzling over mathematical problems. Maths is boring.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2201*	2,91	1,00	,64				
				Bsf2202*	3,21	,99	,36				
				Bsf2203*	3,23	,87	,64				
				Bsf2204*	2,58	1,11	,55				
				Bsf2205*	3,05	1,05	,57				

				Bsf2206*	3,42	,79	,53				
				Bsf2207*	2,76	1,03	,72				
				Bsf2208*	2,85	1,06	,74				
				Bsf2209	2,99	1,05	,45				
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0.86 \bar{x} = 27,00 SD = 6.10 min = 1, max = 4 N = 3850				Cronbach's α = \bar{x} = SD = min = , max = N =			

2 Family

2.1 Socio-Economic Status

2.1.1 Occupation of Parents

Employment Status

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl701a, Aefl701b
Variable label:	Aefl701a Aefl701b	Occupational status father Occupational status mother
Data source:	Parent questionnaire	
Coding:	Value 1 2 3 4	Value label In paid full-time work or equivalent In paid work only part-time Not in paid work, but is looking for a position Other

Item Analysis

Variable	1	2	3	4	N
Aefl701a	74,6	5,3	6,5	13,6	3290
Aefl701b	34,1	36,6	8,8	20,5	3278

Occupation: Full Details

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl901a, Aefl901b
Variable label:	Aefl901a Aefl901b	Occupation of father Occupation of mother
Data source:	Parent questionnaire	
Notes:	Open-response format	

Occupation: Categories

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl801a, Aefl801b
Variable label:	Aefl801a Aefl801b	Occupation type father Occupation type mother
Data source:	Parent questionnaire	
Coding:	Value	Value label
	1	Self-employed
	2	Self-employed university graduate
	3	Family worker
	4	Civil servant
	5	Salaried employee
	6	Manual worker
	7	Other

Item Analysis

Variable	1	2	3	4	5	6	7	N
Aefl801a	20,1	4,2	0,4	9,8	39,2	21,7	4,5	3251
Aefl801b	8,5	4,3	1,9	7,8	56,1	10,5	10,9	3240

Occupation: Not in Employment

Variable name: ELEMENT 4: Aef2001a, Aef2001b, Aef2002
 ELEMENT 5:
 ELEMENT 6:

Variable label: Aef2001a If father unemployed, then
 Aef2001b If mother unemployed, then
 Aef2002 If unemployed, then other:

Data source: Parent questionnaire

Notes: *Aef2002* open-response format

Coding: Aef2001a, Aef2001b
 Value Value label
 1 Housewife/house husband
 2 Unemployed
 3 In training
 4 In occupational retraining
 5 Retired
 6 Student
 7 Social welfare recipient
 8 Other

Item Analysis

Variable	1	2	3	4	5	6	7	8	N
Aef2001a	6,0	57,1	1,1	5,1	8,3	2,0	9,3	10,8	564
Aef2001b	59,3	20,9	1,7	2,1	1,5	2,4	5,3	6,7	1171

Occupational Prestige and Socio-Economic Status

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Ainhise
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	HISEI Index (highest social status)
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AinhiseZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	HISEI Index (highest social status) imp
Literature:	PISA 2000	
Data source:	Parent questionnaire	

Notes: "Information on [...] the current occupation or most recent occupation collected in ELEMENT, was used to determine [...] indicators for the children's socio-economic background: [...] the International Socio-Economic Index of Occupational Status (ISEI) after the occupational classification index by Ganzeboom, De Graaf, and Treiman (1996). The occupations of the parents were encoded in line with the International Standard Classification of Occupations ISCO-88 to produce the International Socio-Economic Index. For the design of the ISEI scale, the occupations were grouped and hierarchically ordered by aspects of duration of training, income, and social occupational prestige. The HISEI, the index for the highest occupational status of the family, was produced from the data for both parents and was also used in the international PISA report. The ISEI/HISEI variables resulting from the recording of the three-digit occupational sub-groups from ISCO-88 exhibit a minimum of 16 and a maximum of 85: a higher value corresponds to a higher socio-economic status. Data on family background was collected in ELEMENT via the parents' questionnaire which was completed voluntarily ." (ELEMENT 4 report, p. 33f)

Item Analysis

Variable	\bar{x}	SD	min	max	N
Ainhise	53,80	16,23	16	85	3423
AinhiseZ	51,45	16,63	16	85	4926

Frequencies

		Percentiles						
		5	10	25	50	75	90	95
Weighted mean	Ainhise	29,00	32,00	43,00	52,00	66,00	74,00	85,00
	AinhiseZ	24,00	30,00	39,00	51,00	65,00	73,00	85,00

2.1.2 Relative Prosperity of the Family

Availability of Educational Resources

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf2101 – Asf2108
Variable label:	Asf2101 Asf2102 Asf2103 Asf2104 Asf2105 Asf2106 Asf2107 Asf2108	Do you have access at home to - a computer? Do you have access at home to - a desk or place to work just for you? Do you have access at home to - books which belong just to you? Do you have access at home to - a daily newspaper? Do you have access at home to - your own room? Do you have access at home to - educational programs for the computer? Do you have access at home to - an internet connection? Do you have access at home to - a musical instrument?
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf2101Z – Asf2108Z
Imputation label:	Asf2101Z Asf2102Z Asf2103Z Asf2104Z Asf2105Z Asf2106Z Asf2107Z Asf2108Z	Do you have access at home to - a computer? imp Do you have access at home to - a desk or place to work just for you? imp Do you have access at home to - books which belong just to you? imp Do you have access at home to - a daily newspaper? imp Do you have access at home to - your own room? imp Do you have access at home to - educational programs for the computer? imp Do you have access at home to - an internet connection? imp Do you have access at home to - a musical instrument? imp
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	1	2	N
Asf2101	11,4	88,6	3822
Asf2102	7,2	92,8	3838
Asf2103	5,7	94,3	3834
Asf2104	47,7	52,3	3794
Asf2105	20,4	79,6	3823
Asf2106	32,5	67,5	3814
Asf2107	34,2	65,8	3808
Asf2108	32,4	67,6	3819
Asf2101Z	11,9	88,1	4926
Asf2102Z	7,1	92,9	4926
Asf2103Z	5,6	94,4	4926
Asf2104Z	49,2	50,8	4926
Asf2105Z	22,1	77,9	4926
Asf2106Z	33,6	66,4	4926
Asf2107Z	36,1	63,9	4926
Asf2108Z	34,4	65,6	4926

2.2 Cultural Capital

2.2.1 Cultural Practice in the Family

Parents' Reading Motivation

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0901 – Aef0906
Variable label:	Aef0901 Aef0902 Aef0903 Aef0904 Aef0905 Aef0906	At home, how often do you read - German novels At home, how often do you read - novels in another language At home, how often do you read - German newspapers and magazines At home, how often do you read - English newspapers and magazines At home, how often do you read - Turkish newspapers and magazines At home, how often do you read - newspapers and magazines in other languages
Data source	Parent questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Aef0901	28,6	20,5	24,0	26,9	3547
Aef0902	4,3	6,2	13,9	75,6	3223
Aef0903	65,2	24,0	7,3	3,5	3624
Aef0904	1,6	4,3	11,5	82,6	3201
Aef0905	4,2	3,3	1,7	90,8	3179
Aef0906	4,7	7,2	9,6	78,6	3223

Attitudes of Parents to Reading (Student Statements)

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskaeleN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Attitudes of parents to reading new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	5
Notes:	High values represent a positive attitude to reading amongst parents. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0501– Bsf0505
Variable label:	Bsf0501* Bsf0502* Bsf0503* Bsf0504* Bsf0505	My parents - like reading. My parents - are happy when I read a lot. My parents - think that reading is a good thing to do. My parents - think reading is interesting. My parents - prefer watching TV to reading.

Scale Analysis

	ELEMENT 4			ELEMENT 5			ELEMENT 6		
Variable	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}	\bar{x}	SD	r_{it}
Bsf0501*				3,57	,70	,57			
Bsf0502*				3,61	,77	,43			
Bsf0503*				3,75	,55	,57			
Bsf0504*				3,54	,72	,63			
Bsf0505				2,96	,97	,36			
	Cronbach's α = \bar{x} = SD = min = , max = N =			Cronbach's α = 0.75 \bar{x} = 17,44 SD = 2.57 min = 1, max = 4 N = 3982			Cronbach's α = \bar{x} = SD = min = , max = N =		

2.2.1.1 Book Ownership

Total amount of books in general (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf2201		
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Approximately how many books are there at home?		
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AinbhbZ		
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Book numbers imp		
Data source:	Student questionnaire			
Notes:	To make it easier for students to answer the question, they were given illustrations showing the respective numbers of books in a bookcase, with one shelf providing space for 25 books. Excluding newspapers, magazines, and schoolbooks.			
Coding:	Value	Value label	Value	Value label
	1	0-10 books	1	Up to 25
	2	11-25 books	2	Up to 100
	3	26-100 books	3	Up to 200
	4	101-200 books	4	Over 200
	5	Over 200 books		

Item Analysis

Variable	1	2	3	4	5	N
Asf2201	7,3	11,1	21,9	25,4	34,2	3959

Variable	1	2	3	4	N
AinbhbZ	19,9	22,9	24,7	32,6	4926

Possession of German-Language Books (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl001
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How many German-language books are there in your household?
Data source:	Parent questionnaire	
Notes:	Excluding newspapers, magazines, and schoolbooks	
Coding:	Value	Value label
	1	0 - 10 books
	2	11 - 25 books
	3	26 - 100 books
	4	101-200 books
	5	Over 200 books

Item Analysis

Variable	1	2	3	4	5	N
Aefl001	9,4	10,8	23,4	16,4	40,1	3718

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl101 – Aefl102
Variable label:	Aefl101 Aefl102	How many books in other languages are there in your household? Books in other languages in household: language ...
Data source:	Parent questionnaire	
Notes:	Excluding newspapers, magazines, and schoolbooks	

Coding:	Aef1101	Aef1102
	Value	Value label
	1	0 - 10 books
	2	11 - 25 books
	3	26 - 100 books
	4	101-200 books
	5	Over 200 books
		Value
		Value label
	1	German
	2	Albanian
	3	Arabic
	4	English
	5	Farsi
	6	French
	7	Greek
	8	Italian
	9	Croatian
	10	Kurdish
	11	Polish
	12	Portuguese
	13	Serbian
	14	Spanish
	15	Turkish
	16	Russian
	17	Chinese
	29	Serbo-Croat
	41	Vietnamese
	46	Dutch
	100	Minang and Indonesian
	101	Urdu
	115	Turkish and German
	1516	Turkish and Russian
	4117	English, German, and Polish

Variable	1	2	3	4	5	N
Aefl101	58,4	19,3	14,5	4,1	3,7	3684

[illegible]

Possession of German-Language Children's Books (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl201
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How many German-language children's books are there in your household?
Data source:	Parent questionnaire	
Coding:	Value	Value label
	1	0 - 10 books
	2	11 - 25 books
	3	26 - 50 books
	4	51-100 books
	5	Over 100 books

Item Analysis

Variable	1	2	3	4	5	N
Aefl201	9,0	14,8	25,3	25,3	25,5	3720

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl301 – Aefl302
Variable label:	Aefl301 Aefl302	How many children's books in other languages are there in your household? Children's books in other languages in household: language ...
Data source:	Parent questionnaire	

Coding:	Aef1301	Aef1302
	Value Value label	Value Value label
	1 0 - 10 books	1 German
	2 11 - 25 books	2 Albanian
	3 26 - 50 books	3 Arabic
	4 51-100 books	4 English
	5 Over 100 books	5 Farsi
		6 French
		7 Greek
		8 Italian
		9 Croatian
		10 Kurdish
		11 Polish
		12 Portuguese
		13 Serbian
		14 Spanish
		15 Turkish
		16 Russian
		17 Chinese
		29 Serbo-Croat
		41 Vietnamese
		46 Dutch
		100 Minang and Indonesian
		101 Urdu
		115 Turkish and German
		1516 Turkish and Russian
		4117 English, German, and Polish

Variable	1	2	3	4	5	N
Aef1301	82,8	10,0	4,2	2,2	0,9	3601

[illegible]

2.2.2 Ethnic Background

2.2.2.1 Origin

Student Country of Birth: Germany (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0607
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Family members born in Germany - your child
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0607Z
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Country of birth child E4 imp
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef0607	6,78	93,22	3671

Student Country of Birth: Not Germany (Parent Statements)

Variable name: ELEMENT 4: Aef0610
 ELEMENT 5:
 ELEMENT 6:

Variable label: Aef0610 Child was born in ...

Data source: Parent questionnaire

Notes: *Aef0610* was only processed if *Aef0607* was answered with "no".

Coding:	Value	Value label
	21	Afghanistan
	22	Albania
	23	Bosnia and Herzegovina
	24	Bulgaria
	25	France
	26	Greece
	27	Italy
	28	Yugoslavia
	29	Croatia
	30	Poland
	31	Portugal
	32	Romania
	33	Russian Federation
	34	Slovenia
	35	Spain
	36	Turkey
	37	UK
	38	Cyprus
	39	Other Europe
	40	Africa
	41	Asia
	42	USA
	43	Canada
	44	Latin America
	45	Australia/Oceania
	46	Other

Item Analysis

Variable	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Aef0610	0	0,4	1,5	0	0,9	0	0	0,4	0,6	1,8	0,3	0,1	8,6	0,1
	35	36	37	38	39	40	41	42	43	44	45	46		N
	0,1	4,3	0,4	0	7,3	0,6	12,5	0,6	0	0,9	0	58,3		671

Student Country of Birth: German Land or Nationality

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprgebl
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Country of birth E4
Data source:	No information	
Coding:	Value	Value label
	0	Blank
	1	Baden-Württemberg
	2	Bavaria
	3	Berlin
	4	Brandenburg
	5	Bremen
	6	Hamburg
	7	Hessen
	8	Mecklenburg-Vorpommern
	9	Lower Saxony
	10	North Rhine-Westphalia
	11	Rhineland-Palatinate
	12	Saarland
	13	Saxony
	14	Saxony-Anhalt
	15	Schleswig-Holstein
	16	Thuringia
	21	Afghanistan
	22	Albania
	23	Bosnia and Herzegovina
	24	Bulgaria
	25	France
	26	Greece
	27	Italy
	28	Yugoslavia
	29	Croatia
	30	Poland
	31	Portugal
	32	Romania
	33	Russian Federation
	34	Slovenia
	35	Spain
	36	Turkey
	37	United Kingdom
	38	Cyprus
	39	Other Europe
	40	Africa
	41	Asia
	42	USA
	43	Canada
	44	Latin America
	45	'Australia/Oceania'
	46	Other

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Aprgebl	1,7	0,9	81,2	1,2	0,1	0,4	0,5	0,4	0,9	1,4	0,3	0,6	0,4	0,3	0,2
	16	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	0,2	0,1	0,2	0,4	0	0,2	0	0	0,4	0,1	0,4	0,1	0	2,5	0
	35	36	37	38	39	40	41	42	43	44	45	46			N
	0	1,1	0	0	0,5	0,3	1,1	0,2	0	0,2	0	1,6			4642

Student Country of Birth: Germany

Variable name: ELEMENT 4: Aprgldt
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Country of birth Germany
 ELEMENT 5:
 ELEMENT 6:

Notes: Summary of variable *Aprgebl*

Aprgldt corresponds to the data of *Asf0301* but exhibits fewer missing values (*Aprgldt*: 201; *Asf0301*: 538).

Coding: Value Value label
 0 Other country
 1 Germany

Item Analysis

Variable	0	1	N
Aprgldt	9,1	90,9	4725

Student Country of Birth: Germany (Student Statements)

Variable name: ELEMENT 4: Asf0301
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Born in Germany E4
ELEMENT 5:
ELEMENT 6:

Data source: Student questionnaire

Coding: Value Value label
0 No
1 Yes

Item Analysis

Variable	0	1	N
Asf0301	8,5	91,5	4388

Age of Students on Arrival in Germany

Variable name: ELEMENT 4: Asf0302
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Arrived in Germany at age of E4
ELEMENT 5:
ELEMENT 6:

Data source: Student questionnaire

Coding: Value Value label
1 10 years or older
2 9 years
3 8 years
4 7 years
5 6 years
6 5 years
7 4 years
8 3 years
9 2 years
10 1 year and younger

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	N
Asf0302	34,2	6,9	5,2	5,3	3,3	4,2	3,3	2,9	5,2	29,5	792

Parents' Country of Birth

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0608, Aef0609
Variable label:	Aef0608 Aef0609	Father of child was born in ... Mother of child was born in ...
Data source:	Parent questionnaire	
Coding:	Value	Value label
	21	Afghanistan
	22	Albania
	23	Bosnia and Herzegovina
	24	Bulgaria
	25	France
	26	Greece
	27	Italy
	28	Yugoslavia
	29	Croatia
	30	Poland
	31	Portugal
	32	Romania
	33	Russian Federation
	34	Slovenia
	35	Spain
	36	Turkey
	37	UK
	38	Cyprus
	39	Other Europe
	40	Africa
	41	Asia
	42	USA
	43	Canada
	44	Latin America
	45	Australia/Oceania
	46	Other

Item Analysis

Variable	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Aef0608	0,2	0,4	1,9	0,5	0,8	1,0	1,7	1,0	1,1	6,0	0,3	0,5	6,2	0,1
Aef0609	0	0,4	2,0	0,1	1,4	1,1	0,4	0,8	1,2	8,3	0,3	0,4	7,6	0,1
	35	36	37	38	39	40	41	42	43	44	45	46		N
	0,4	29,9	1,3	0	7,5	4,0	23,2	1,0	0,1	1,4	0,2	9,7		1088
	0,8	27,8	0,4	0	6,0	2,2	23,7	0,5	0,1	1,3	0,3	12,9		1042

Parents' Country of Birth: Germany (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0605, Aef0606
Variable label:	Aef0605 Aef0606	Family members born in Germany - father of child Family members born in Germany - mother of child
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0605Z, Aef0606Z
Imputation label:	Aef0605Z Aef0606Z	Country of birth father E4 imp Country of birth mother E4 imp
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef0605	25,53	74,47	3506
Aef0605Z	29,9	70,1	4926
Aef0606	23,03	76,97	3517
Aef0606Z	27,9	72,1	4926

Parents' Country of Birth: Germany – Summary (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Apreltl
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Parents' country of birth Germany?
Data source:	Parent questionnaire	
Notes:	Summary of <i>Aef0605Z</i> and <i>Aef0606Z</i>	
Coding:	Value 0 1 2	Value label Both parents abroad Both parents in Germany One parent in Germany

Item Analysis

Variable	0	1	2	N
Apreltl	22,20	64,50	13,30	4926

Parents' Country of Birth: Germany (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1901, Asf2001
Variable label:	Asf1901 Asf2001	Was your mother born in Germany? Was your father born in Germany?
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	2	N
Asf1901	29,80	67,21	2,99	4014
Asf2001	30,29	63,86	5,85	4015

Grandparents' (Mother) Country of Birth: Germany

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0601, Aef0602
Variable label:	Aef0601 Aef0602	Family members born in Germany - grandfather (mother) Family members born in Germany - grandmother (mother)
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef0601	32,17	67,83	3808
Aef0602	31,18	68,82	3809

Grandparents' (Father) Country of Birth: Germany

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef0603, Aef0604
Variable label:	Aef0603 Aef0604	Family members born in Germany - grandfather (father) Family members born in Germany - grandmother (father)
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef0603	34,39	65,61	3806
Aef0604	33,84	66,16	3806

Nationality of Students

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprstag Bprstag Cprstag
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Nationality E4 Nationality E5 Nationality E6
Data source:	Student records	
Coding:	Value	Value label
	0	Blank
	1	German
	2	Afghan
	3	Bosnian
	4	British
	5	French
	6	Greek
	7	Iranian
	8	Italian
	9	Croatian
	10	Pakistani
	11	Polish
	12	Portuguese
	13	Serbian
	14	Spanish
	15	Turkish
	16	From an Arabic-speaking country
	17	From an non-Arabic-speaking African country
	18	From an east-Asian/southeast-Asian country
	19	Russian/from another country in the former Soviet Union
	20	From another country
	21	Stateless

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11
Aprstag	82,0	0,1	0,9	0	0,1	0,3	0,3	0,2	0,3	0	1,0
Bprstag	82,0	0,1	0,8	0	0,1	0,3	0,3	0,2	0,4	0	0,9
Cprstag	82,2	0,1	0,9	0,0	0,1	0,3	0,3	0,2	0,3	0	0,9
	12	13	14	15	16	17	18	19	20	21	N
Aprstag	0,1	0,3	0,1	7,3	1,4	0,2	2,5	1,2	1,5	0,3	4660
Bprstag	0,1	0,2	0,1	7,6	1,3	0,2	2,4	1,2	1,6	0,3	4660
Cprstag	0,1	0,3	0,1	7,3	1,3	0,2	2,4	1,2	1,5	0,3	4629

Student Nationality: German

Variable name: Xprstdt

Variable label: Student nationality German

Notes: Summary of variables *Aprstag*, *Bprstag*, *Cprstag*

Coding:	Value	Value label
	0	No German citizenship
	1	German citizenship

Item Analysis

Variable	0	1	N
Xprstdt	18,00	82,00	4660

Student Migration Status

Variable name: Xprmst

Variable label: Student migration status

Notes: As opposed to migration background *Xprmigh*, migration status *Xprmst* only provides information on the student.

Coding:	Value	Value label
	1	German
	2	German with migration background
	3	Foreigner

Item Analysis

Variable	1	2	3	N
Xprmst	72,7	9,3	18,0	4735

Migration Status of Parents

Variable name: Xprmstf

Variable label: Family migration status

Notes: As opposed to migration background *Xprmigh*, migration status *Xprmstg* only provides information on the parents.

Coding:	Value	Value label
	0	Both parents born in Germany
	1	One parent born in Germany
	2	Student, but not parents, born in Germany
	3	Neither student nor parents born in Germany

Item Analysis

Variable	0	1	2	3	N
Xprmstf	64,5	13,3	17,3	5,0	4926

Student Migration Background

Variable name: Xprmigh

Variable label: Migration background

Notes: As opposed to migration status *Xprmst*, migration background *Xprmigh* provides information on students and parents.

Coding:	Value	Value label
	1	Both parents in Germany/MS German
	2	One parent in Germany/MS German
	3	One parent in Germany/MS other
	4	Student, but not parents, in Germany/MS other
	5	Neither parents nor student in Germany/MS other
	6	Both parents in Germany/MS other
	7	Student, but not parents, in Germany/MS German
	8	Neither parents nor student in Germany/MS German

Item Analysis

Variable	1	2	3	4	5	6	7	8	N
Xprmigh	63,3	9,4	3,9	15,5	4,4	1,2	1,8	0,6	4926

Student Migration Background: Summary

Variable name: Xprmighz

Variable label: Migration background summarised

Notes: Summary of Migration background variable *Xprmigh*

Coding:	Value	Value label
	1	At least 1 parent in Germany/MS German
	2	At least 1 parent in Germany/MS other
	3	Both parents abroad/MS other
	4	Both parents abroad/MS German

Item Analysis

Variable	1	2	3	4	N
Xprmighz	72,7	5,1	19,9	2,4	4926

Student Migration Background: Dummy Variables

Variable name: Xprmighz2 – Xprmighz4

Variable label:	Xprmighz2	Dummy variable of migration background summary consolidated: at least 1 parent in Germany/MS other
	Xprmighz3	Dummy variable of migration background summary: at least 1 parent abroad/MS other
	Xprmighz4	Dummy variable of migration background summary: both parents abroad/MS German

Data source: Parent questionnaire

Notes: Dummy variables for *Xprmighz*

Coding:	Value	Value label
	0	No
	1	Yes

2.2.2.2 Language

Language of Communication at Home

Variable name: ELEMENT 4: Aef0301 – Aef0302
 ELEMENT 5:
 ELEMENT 6:

Variable label: Aef0301 What language do you mostly speak at home?
 Aef0302 What language do you mostly speak at home? Another:

Data source: Parent questionnaire

Notes: Aef0302 open-response format

Coding: Aef0301		Aef0302	
Value	Value label	Value	Value label
1	Albanian	1	German
2	German	2	Albanian
3	English	3	Arabic
4	Farsi	4	English
5	French	5	Farsi
6	Italian	6	French
7	Croatian	7	Greek
8	Kurdish	8	Italian
9	Polish	9	Croatian
10	Russian	10	Kurdish
11	Serbian	11	Polish
12	Spanish	12	Portuguese
13	Turkish	13	Serbian
14	Another language	14	Spanish
		15	Turkish
		16	Russian
		17	Chinese
		29	Serbo-Croat
		41	Vietnamese
		100	Minang and Indonesian
		101	Urdu
		110	German and Kurdish
		115	German and Turkish

Parents' Language of Communication

Variable name: ELEMENT 4: Aef0401– Aef0404
ELEMENT 5:
ELEMENT 6:

Variable label: Aef0401 In what language do you as parents speak to each other?
Aef0402 Parents amongst themselves - mostly Germany, but often also others:
Aef0403 Parents amongst themselves - usually another:
Aef0404 Parents amongst themselves - only another:

Data source: Parent questionnaire

Notes: Aef0402, Aef0403, Aef0404 open-response format

Coding:

Aef0401		Aef0402		Aef0403		Aef0404	
Value	Value label	Value	Value label	Value	Value label	Value	Value label
1	German only	1	German	1	German	1	German
2	Usually German, but often also others	2	Albanian	2	Albanian	2	Albanian
3	Usually others	3	Arabic	3	Arabic	3	Arabic
4	Only others	4	English	4	English	4	English
		5	Farsi	5	Farsi	5	Farsi
		6	French	6	French	6	French
		7	Greek	7	Greek	7	Greek
		8	Italian	8	Italian	8	Italian
		9	Croatian	9	Croatian	9	Croatian
		10	Kurdish	10	Kurdish	10	Kurdish
		11	Polish	11	Polish	11	Polish
		12	Portuguese	12	Portuguese	12	Portuguese
		13	Serbian	13	Serbian	13	Serbian
		14	Spanish	14	Spanish	14	Spanish
		15	Turkish	15	Turkish	15	Turkish
		16	Russian	16	Russian	16	Russian
		17	Chinese	17	Chinese	17	Chinese
		29	Serbo-Croat	29	Serbo-Croat	29	Serbo-Croat
		41	Vietnamese	41	Vietnamese	41	Vietnamese
				101	Urdu	100	Minang and Indonesian
						101	Urdu

Parents' Language with Students

Variable name: ELEMENT 4: Aef0501 - Aef0504
ELEMENT 5:
ELEMENT 6:

Variable label: Aef0501 In which language do you speak to your child?
Aef0502 Language with child - usually German, but often also others:
Aef0503 Language with child - usually another:
Aef0504 Language with child - only another:

Data source: Parent questionnaire

Notes: Aef0502, Aef0503, Aef0504 open-response format

Coding:

Aef0501		Aef0502		Aef0503		Aef0504	
Value	Value label	Value	Value label	Value	Value label	Value	Value label
1	German only	1	German	1	German	1	German
2	Usually German, but often also others	2	Albanian	2	Albanian	2	Albanian
3	Usually others	3	Arabic	3	Arabic	3	Arabic
4	Only others	4	English	4	English	4	English
		5	Farsi	5	Farsi	5	Farsi
		6	French	6	French	6	French
		7	Greek	7	Greek	7	Greek
		8	Italian	8	Italian	8	Italian
		9	Croatian	9	Croatian	9	Croatian
		10	Kurdish	10	Kurdish	10	Kurdish
		11	Polish	11	Polish	11	Polish
		12	Portuguese	12	Portuguese	12	Portuguese
		13	Serbian	13	Serbian	13	Serbian
		14	Spanish	14	Spanish	14	Spanish
		15	Turkish	15	Turkish	15	Turkish
		16	Russian	16	Russian	16	Russian
		17	Chinese	17	Chinese	17	Chinese
		29	Serbo-Croat	29	Serbo-Croat	29	Serbo-Croat
		41	Vietnamese	41	Vietnamese	41	Vietnamese
		101	Urdu	100	Minang and Indonesian	100	Minang and Indonesian
		417	Persian and English	101	Urdu	101	Urdu
		1003	Kurdish and Turkish	115	Turkish and German	115	Turkish and German
				1516	Turkish and Russian	1516	Turkish and Russian
				4117	English, German, and Polish	4117	English, German, and Polish

Students' First Language Learnt in the Family (Parent Statements)

Variable name: ELEMENT 4: Aef0201 - Aef0202
 ELEMENT 5:
 ELEMENT 6:

Variable label: Aef0201 Which language did your child first learn in the family?
 Aef0202 Which language did your child first learn in the family?
 Another:

Data source: Parent questionnaire

Notes: *Aef2002* open-response format

Aef0201		Aef0202	
Value	Value label	Value	Value label
1	German	1	German
2	German and one other language	2	Albanian
3	Another language	3	Arabic
		4	English
		5	Farsi
		6	French
		7	Greek
		8	Italian
		9	Croatian
		10	Kurdish
		11	Polish
		12	Portuguese
		13	Serbian
		14	Spanish
		15	Turkish
		16	Russian
		17	Chinese
		29	Serbo-Croat
		41	Vietnamese
		100	Minang and Indonesian
		101	Urdu
		115	Turkish and German
		1516	Turkish and Russian
		4117	English, German, and Polish

Student Native Language (Parent Statements)

Variable name: ELEMENT 4: Aprms
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Native language
ELEMENT 5:
ELEMENT 6:

Data source: Parent questionnaire

Notes: Based on *Aef0301*

Coding:	Value	Value label
	1	German
	2	Albanian
	3	Arabic
	4	English
	5	Farsi
	6	French
	7	Greek
	8	Italian
	9	Croatian
	10	Kurdish
	11	Polish
	12	Portuguese
	13	Serbian
	14	Spanish
	15	Turkish
	16	Other
	18	East-Asian/southeast-Asian language
	24	Bulgarian

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11
Csf0106	75,1	0,5	2,5	0,5	0,3	0,3	0,3	0,2	0,6	0,5	1,5
	12	13	14	15	16	18	24				N
	0,2	0,5	0,3	9,2	5,0	2,5	0				4673

Student Native Language: German (Parent Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprmsdt
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Native language German
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aprmsdt
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Native language German imp
Data source:	Parent questionnaire	
Notes:	Dummy variable for <i>Aef0301</i>	
Coding:	Value 0 1	Value labels Other German

Item Analysis

Variable	0	1	N
Aprmsdt	24,9	75,1	4926

Language in the Family: German

Variable name: ELEMENT 4: Aprfspr
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Language in the family German
ELEMENT 5:
ELEMENT 6:

Data source: Student questionnaire

Notes: Based on *Asf0405* and *Asf0405*, whereby with at least one parent German must be spoken at minimum usually for a value of 1 to be assigned.

Coding:	Value	Value label
	0	Not German
	1	German

Item Analysis

Variable	0	1	N
Aprfspr	7,7	92,3	3732

Frequency of German-Language Usage

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf0401- Asf0408
Variable label:	Asf0401 Asf0402 Asf0403 Asf0404 Asf0405 Asf0406 Asf0407 Asf0408	How often do you speak German with - best friend? How often do you speak German with - your fellow students during breaks? How often do you speak German with - children in the neighbourhood? How often do you speak German with - children in your sports group? How often do you speak German with - your mother? How often do you speak German with - your father? How often do you speak German with - your brothers or sisters? How often do you speak German with - your grandparents?
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4 5	Value label Always or almost always Usually Rarely Never or almost never Does not apply to me

Item Analysis

Variable	1	2	3	4	5	N
Asf0401	83,4	10,6	1,7	0,5	3,8	3908
Asf0402	79,6	13,4	2,5	0,6	4,0	3873
Asf0403	57,2	13,8	11,2	6,7	11,1	3850
Asf0404	66,7	13,3	4,8	2,6	12,6	3789
Asf0405	74,4	10,6	5,7	4,4	4,8	3871
Asf0406	70,4	11,0	6,6	4,7	7,4	3833
Asf0407	64,7	11,7	3,5	1,9	18,2	3694
Asf0408	55,2	12,0	10,3	10,3	12,2	3791

Non-German Language Skills

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf0501, Asf0501a, Asf0501b
Variable label:	Asf0501 Asf0501a Asf0501b	What language do you speak other than German? GSXX only What language do you speak other than German? First answer GSXX only What language do you speak other than German? Second answer GSXX only

Data source: Student questionnaire

Notes: Open-response format for all

Coding:	Aef0501	Aef0501a, Aefb0501b
	Value Value label	Value Value label
	2 Albanian	1 German
	3 Arabic	2 Albanian
	4 English	3 Arabic
	6 French	4 English
	7 Greek	5 Farsi
	8 Italian	6 French
	9 Croatian	7 Greek
	10 Kurdish	8 Italian
	11 Polish	9 Croatian
	12 Portuguese	10 Kurdish
	13 Serbian	11 Polish
	14 Spanish	12 Portuguese
	15 Turkish	13 Serbian
	16 Other	14 Spanish
	17 Vietnamese	15 Turkish
		16 Other

Item Analysis

Variable	2	3	4	6	7	8	9	10
Asf0501	1,2	7,0	27,2	1,1	1,3	1,3	1,9	1,5
	11	12	13	14	15	16	17	N
	4,5	0,5	0,2	1,5	26,6	6,8	17,2	986

Variable	1	2	3	4	6	7	8	9
Asf0501a	0	0	3,1	47,7	6,2	4,6	1,5	1,5
	10	11	12	13	14	15	16	N
	1,5	1,5	0	0	4,6	4,6	23,1	65

Variable	1	2	3	4	6	7	8	9
Asf0501b	3,8	0,3	2,3	36,5	7,6	1,2	1,7	0,5

	10	11	12	13	14	15	16	N
	0,2	4,0	0	0,3	5,1	6,0	30,4	602

2.2.3 Parents' School Education and Professional Training

2.2.3.1 Parents' School Education

School Education of Father

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl401a, Aefl402a
Variable label:	Aefl401a Aefl402a	School-leaving qualification father School-leaving qualification father, other:
Data source:	Parent questionnaire	
Notes:	<i>Aefl402a</i> open-response format	
Coding:	Aefl401a Value	Value labels
	1	None
	2	Special school
	3	Polytechnic secondary school after grade 8
	4	Lower secondary school leaving certificate
	5	Intermediate secondary school leaving certificate/polytechnic secondary school after grade 10
	6	Certificate of aptitude for specialised higher education
	7	Certificate of aptitude for higher education/Abitur (university entry qualification)
	8	Other school leaving certificate

Item Analysis

Variable	1	2	3	4	5	6	7	8	N
Aefl401a	4,5	0,5	2,5	10,1	32,7	6,7	41,4	1,6	3390

School Education of Father: Germany

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl501a
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	School-leaving qualification achieved by father in Germany?
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aefl501a	20,2	57,0	2810

School Education of Mother

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl401b, Aefl402b
Variable label:	Aefl401b Aefl402b	School-leaving qualification mother School-leaving qualification mother, other:
Data source:	Parent questionnaire	
Notes:	<i>Aefl402b</i> open-response format	
Coding:	Aefl401b Value 1 2 3 4 5 6 7 8	Value labels None Special school Polytechnic secondary school after grade 8 Lower secondary school leaving certificate Intermediate secondary school leaving certificate/polytechnic secondary school after grade 10 Certificate of aptitude for specialised higher education Certificate of aptitude for higher education/Abitur (university entry qualification) Other school leaving certificate

Item Analysis

Variable	1	2	3	4	5	6	7	8	N
Aefl401b	5,2	0,5	2,1	7,4	37,7	7,5	38,3	1,4	3434

School Education of Mother: Germany

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl501b
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	School-leaving qualification achieved by mother in Germany?
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aefl501b	18,9	58,4	2876

Parents' School Education: Dummy Variables

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AinhiedzZ2 – AinhiedzZ5
Variable label:	AinhiedzZ2 AinhiedzZ3 AinhiedzZ4 AinhiedzZ5	Polytechnic secondary school after grade 8/lower secondary school dummy from highest school-leaving qualification of parents Intermediate secondary school/polytechnic secondary school after grade 10 dummy from highest school-leaving qualification of parents Technical college dummy from highest school-leaving qualification of parents Abitur dummy from highest school-leaving qualification of parents
Notes:	Dummy variables	
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Parents' Highest School Education

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Ainhd
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Highest school-leaving qualification of parents (7-step)
Data source:	Parent questionnaire	
Notes:	Derived from <i>Aefl401a</i> , <i>Aefl402a</i> , <i>Aefl401b</i> , and <i>Aefl402b</i> : the highest category is used.	
Coding:	Value	Value labels
	1	None
	2	Special school
	3	Polytechnic secondary school after grade 8
	4	Lower secondary school leaving certificate
	5	Intermediate secondary school leaving certificate/polytechnic secondary school after grade 10
	6	Certificate of aptitude for specialised higher education
	7	Certificate of aptitude for higher education/Abitur (university entry qualification)

Item Analysis

Variable	1	2	3	4	5	6	7	N
Ainhd	3,4	0,4	1,4	6,2	32,4	6,5	49,7	3531

Parents' Highest School Education: Summary

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Ainhdz
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Highest school-leaving qualification of parents (5-step)
Imputation name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AinhdzZ
Imputation label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Highest school-leaving qualification of parents (5-step) imp
Data source:	Parent questionnaire	
Notes:	Derived from <i>AinhiedzZ2</i> - <i>AinhiedzZ5</i> : the highest category is used.	
Coding:	Value	Value labels
	1	None or special school
	2	Polytechnic secondary school after grade 8/lower secondary school
	3	Intermediate secondary school leaving certificate/polytechnic secondary school after grade 10
	4	Certificate of aptitude for specialised higher education
	5	Abitur (university entry qualification)

Item Analysis

Variable	1	2	3	4	5	N
Ainhdz	3,9	7,6	32,4	6,4	49,7	3531
AinhdzZ	3,9	8,4	35,5	6,1	46,1	4926

2.2.3.2 Parents' Professional Training

Professional Training of Father

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl601a - Aefl609a
Variable label:	Aefl601a Aefl602a Aefl603a Aefl604a Aefl605a Aefl606a Aefl607a Aefl608a Aefl609a	Professional training father - none completed Professional training father - completed apprenticeship/vocational extension school Professional training father - college of further education/business college Occupational training father - technical college/healthcare college Occupational training father - higher national diploma/college of advanced vocational studies diploma Professional training father - university degree Professional training father - doctoral degree Professional training father - other vocational qualification Other vocational qualification father:
Data source:	Parent questionnaire	
Notes:	<i>Aefl609a</i> open-response format	
Coding:	Value 0 1	Value labels No Yes

Item Analysis

Variable	0	1	N
Aefl601a	91,17	8,83	4189
Aefl602a	70,57	29,43	4189
Aefl603a	88,68	11,32	4189
Aefl604a	89,95	10,05	4189
Aefl605a	89,93	10,07	4189
Aefl606a	78,97	21,03	4189
Aefl607a	93,48	6,52	4189
Aefl608a	97,25	2,75	4189

Highest Professional Training of Father

Variable name: ELEMENT 4: Aprbbv

ELEMENT 5:

ELEMENT 6:

Variable label: ELEMENT 4: Professional training father

ELEMENT 5:

ELEMENT 6:

Data source: Parent questionnaire

Notes: Derived from *Aefl601a* - *Aefl609a*: the highest category is used.

Coding:	Value	Value label
	1	None
	2	Completed apprenticeship/vocational extension school
	3	College of further education/business college
	4	Technical college/healthcare college
	5	Higher national diploma/college of advanced vocational studies diploma
	6	University degree
	7	Doctoral degree

Item Analysis

Variable	1	2	3	4	5	6	7	N
Aprbbv	10,2	26,6	11,3	11,1	11,3	21,5	8,1	3348

Professional Training of Mother

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aefl601b - Aefl609b
Variable label:	Aefl601b Aefl602b Aefl603b Aefl604b Aefl605b Aefl606b Aefl607b Aefl608b Aefl609b	Professional training mother - none completed Professional training mother - completed apprenticeship/vocational extension school Professional training mother - college of further education/business college Occupational training mother - technical college/healthcare college Occupational training mother - higher national diploma/college of advanced vocational studies diploma Professional training mother - university degree Professional training mother - doctoral degree Professional training mother - other vocational qualification Other vocational qualification mother:
Data source:	Parent questionnaire	
Notes:	<i>Aefl609b</i> open-response format	
Coding:	Value 0 1	Value labels No Yes

Item Analysis

Variable	0	1	N
Aefl601b	88,24	11,76	4107
Aefl602b	74,14	25,86	4107
Aefl603b	86,26	13,74	4107
Aefl604b	88,46	11,54	4107
Aefl605b	85,29	14,71	4107
Aefl606b	80,64	19,36	4107
Aefl607b	99,64	3,60	4107
Aefl608b	99,77	2,31	4107

Highest Professional Training of Mother

Variable name: ELEMENT 4: Aprbbm
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Professional training mother
ELEMENT 5:
ELEMENT 6:

Data source: Parent questionnaire

Notes: Derived from *Aefl601b* - *Aefl609b*: the highest category is used.

Coding:	Value	Value label
	1	None
	2	Completed apprenticeship/vocational extension school
	3	College of further education/business college
	4	Technical college/healthcare college
	5	Higher national diploma/college of advanced vocational studies diploma
	6	University degree
	7	Doctoral degree

Item Analysis

Variable	1	2	3	4	5	6	7	N
Aprbbm	13,2	23,1	14,0	15,9	9,4	20,3	4,1	3367

Parents' highest professional training

Variable name: ELEMENT 4: Aprbbr
ELEMENT 5:
ELEMENT 6:

Variable label: ELEMENT 4: Parents' highest professional training
ELEMENT 5:
ELEMENT 6:

Data source: Parent questionnaire

Notes: Derived from *Aefl601a* - *Aefl609a* and *Aefl601b* - *Aefl609b*: the highest category is used.

Coding:	Value	Value label
	1	None
	2	Completed apprenticeship/vocational extension school
	3	College of further education/business college
	4	Technical college/healthcare college
	5	Higher national diploma/college of advanced vocational studies diploma
	6	University degree
	7	Doctoral degree

Item Analysis

Variable	1	2	3	4	5	6	7	N
Aprbbr	7,5	19,6	11,0	15,0	12,2	25,2	9,4	3538

2.3 *Social Capital*

2.3.1 Structure and Size of the Family

Size of the Family

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf2401
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How many people in total live in your home?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	2
	2	3
	3	4
	4	5
	5	6
	6	7
	7	8
	8	9
	9	10
	10	Over 10

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	N
Asf2401	7,9	25,5	38,4	16,0	6,8	2,4	1,2	0,4	0,4	1,0	4015

Number of Children

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf2501
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How many children in total live in your home?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	1
	2	2
	3	3
	4	4
	5	5
	6	6
	7	7
	8	8
	9	9
	10	10
	11	More than 10

Item Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	N
Asf2501	28,8	44,7	16,0	6,3	2,0	1,0	0,6	0,3	0,1	0,1	0,2	3760

Family Members Living in Household

Variable name: ELEMENT 4: Asf2301 – Asf2307
 ELEMENT 5:
 ELEMENT 6:

Variable label: Asf2301 Who lives in your home? - mother
 Asf2302 Who lives in your home? - father
 Asf2303 Who lives in your home? - stepmother
 Asf2304 Who lives in your home? - stepfather
 Asf2305 Who lives in your home? - brothers and sisters
 Asf2306 Who lives in your home? - grandparents
 Asf2307 Who lives in your home? - other persons

Data source: Student questionnaire

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Asf2301	7,15	92,85	4016
Asf2302	27,55	72,45	4004
Asf2303	98,08	1,92	4015
Asf2304	91,38	8,62	4008
Asf2305	35,56	64,44	4004
Asf2306	94,40	5,60	4016
Asf2307	90,01	9,99	401

2.3.2 Parents' Attitudes to Parenting Practices and Parental Support

2.3.2.1 School-Related Attitudes to Parenting Practices and Parental Support

Influence on School-Related Free-Time Behaviour (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1601 – Asf1606
Variable label:	Asf1601 Asf1602 Asf1603 Asf1604 Asf1605 Asf1606	My parents keep a close eye on how much time I spend on homework. My parents decide how long I can watch TV. My parents want me to always do my homework at the same time every day. My parents insist that I spend a certain amount of time reading. My parents want me to do my homework before I meet up with friends. My parents decide how long I can stay out.
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Asf1601	42,45	57,55	4007
Asf1602	34,52	65,48	4001
Asf1603	69,09	30,91	4009
Asf1604	76,17	23,83	4007
Asf1605	17,69	82,31	4008
Asf1606	18,35	81,65	3994

School-Related Parent-Child Relationship (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1701 – Asf1706
Variable label:	Asf1701 Asf1702 Asf1703 Asf1704 Asf1705 Asf1706	My parents think it's important that I don't miss school. I get along well with my parents. My parents praise me for good grades. My parents are interested in the things I learn at school. My parents are proud of me. My parents are pleased with me when I try to give my best at school.
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Asf1701	14,94	85,06	4009
Asf1702	7,96	92,04	4007
Asf1703	8,91	91,09	4007
Asf1704	12,53	87,47	4006
Asf1705	11,86	88,14	3987
Asf1706	6,63	93,37	4015

Supervision of Homework (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0707
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do your parents check your homework?
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0707	50,8	24,8	9,8	14,7	4071

Conversations about School (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0708
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do your parents talk to you about school?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0708	61,1	27,1	7,3	4,5	4101

Parents' Visits to School in School Year

Variable name: ELEMENT 4: Aef2801
 ELEMENT 5:
 ELEMENT 6:

Variable label: ELEMENT 4: Number of visits to school in course of school year
 ELEMENT 5:
 ELEMENT 6:

Data source: Parent questionnaire

Notes: Entry of a number

Item Analysis

Variable	\bar{x}	SD	min	max	N
Aef2801	6,95	8,78	1	200	3465

Frequencies

	Percentiles						
	5	10	25	50	75	90	95
Weighted mean	1,00	2,00	3,00	5,00	8,00	15,00	20,00

Attitude to Supporting Role of School

Variable name: ELEMENT 4:
 ELEMENT 5:
 ELEMENT 6: Cef0308

Variable label: ELEMENT 4:
 ELEMENT 5:
 ELEMENT 6: It is solely the responsibility of the school to provide necessary support.

Data source: Parent questionnaire

Coding: Value Value label
 1 Fully agree
 2 Partially agree
 3 Slightly disagree
 4 Fully disagree

Item Analysis

Variable	1	2	3	4	N
Cef0308	5,2	25,6	37,0	32,2	3566

Support from the Mother

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0301a – Cef0307a
Variable label:	Cef0301a Cef0302a Cef0303a Cef0304a Cef0305a Cef0306a Cef0307a	Mother: support of child - on homework Mother: support of child - private lessons Mother: support of child - contact with school Mother: support of child - discussion of everyday school life Mother: support of child - involvement on school committees Mother: support of child - subject practice Mother: support of child - too little time for support
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Cef0301a	30,8	69,2	4055
Cef0302a	85,4	14,6	4055
Cef0303a	62,8	37,2	4055
Cef0304a	20,4	79,6	4055
Cef0305a	88,7	11,3	4055
Cef0306a	51,3	48,7	4055
Cef0307a	85,7	14,3	4055

Support from the Father

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0301b – Cef0307b
Variable label:	Cef0301b Cef0302b Cef0303b Cef0304b Cef0305b Cef0306b Cef0307b	Father: support of child - on homework Father: support of child - private lessons Father: support of child - contact with school Father: support of child - discussion of everyday school life Father: support of child - involvement on school committees Father: support of child - subject practice Father: support of child - too little time for support
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Cef0301b	54,4	45,6	4055
Cef0302b	92,4	7,6	4055
Cef0303b	83,6	16,4	4055
Cef0304b	50,0	50,0	4055
Cef0305b	94,9	5,1	4055
Cef0306b	67,8	32,2	4055
Cef0307b	83,0	17,0	4055

Rating of Performance Level Required by School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cef0401 - Cef0403
Variable label:	Cef0401 Cef0402 Cef0403	What do/did you think of the performance level required of your daughter/son by the school? - German What do/did you think of the performance level required of your daughter/son by the school? - Mathematics What do/did you think of the performance level required of your daughter/son by the school? - English
Data source:	Parent questionnaire	
Coding:	Value 1 2 3 4 5	Value label Far too low Somewhat too low Appropriate Somewhat too high Far too high

Item Analysis

Variable	1	2	3	4	5	N
Cef0401	3,9	15,5	74,5	5,8	0,4	3934
Cef0402	3,4	12,4	74,4	8,8	1,0	3932
Cef0403	5,3	17,3	68,0	8,1	1,2	3811

Satisfaction with Performance at School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2101
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Satisfaction with child's performance at school
Data source:	Parent questionnaire	
Coding:	Value 1 2 3 4	Value label Highly satisfied Somewhat satisfied Somewhat dissatisfied Highly dissatisfied

Item Analysis

Variable	1	2	3	4	N
Aef2101	52,2	37,8	9,3	0,7	3700

Rating of Learning Problems

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2201 – Aef2205
Variable label:	Aef2201 Aef2202 Aef2203 Aef2204 Aef2205	Child problems in learning area - reading Child problems in learning area - writing Child problems in learning area - arithmetic Child problems in learning area - general knowledge Child problems in learning area - sport
Data source:	Parent questionnaire	
Coding:	Value 1 2 3 4	Value label None Few Some Many

Item Analysis

Variable	1	2	3	4	N
Aef2201	64,2	24,7	9,5	1,6	3650
Aef2202	40,0	36,2	18,5	5,2	3665
Aef2203	48,7	35,6	12,7	2,9	3668
Aef2204	6,20	30,4	6,6	1,0	3636
Aef2205	66,4	24,2	8,0	1,3	3629

2.3.2.2 Attitudes to Extra-Curricular Parenting Practices and Support

Interest in Child's Activities (Student Statements)

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskaikN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Interest in child's activities new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	4
Notes:	High values represent a high level of interest in the child's activities. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Strongly agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf1801, Asf1804 – Asf1806
Variable label:	Asf1801* Asf1804* Asf1805* Asf1806*	My parents always know where I go after school. I talk to my parents about things I plan to do with my friends. When I leave the house, my parents ask me where I'm going. When I meet up with friends, I tell my parents whom I'm meeting.
	The following items were excluded from the scaling:	
	Asf1802*	If I'm going to be coming home later, my parents expect me to call.
	Asf1803	When I finish school, my parents are usually still at work.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf1801*	3,58	,78	,38								
Asf1804*	3,36	,92	,44								
Asf1805*	3,59	,79	,50								
Asf1806*	3,62	,78	,52								

Cronbach's $\alpha = 0,68$ $\bar{x} = 14,14$ SD = 2,33 min = 1, max = 4 N = 3763	Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =	Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =									
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf1802*	3,28	1,07	,27								
Asf1803	2,33	1,22	-,05								
min = 1, max = 4 N = 3706				min = , max = N =				min = , max = N =			

Knowledge of Friends

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskakfN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Knowledge of friends new
Data source:	Parent questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	4
Notes:	High values represent a good knowledge of friends. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Strongly agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2701 – Aef2704
Variable label:	Aef2701* Aef2702* Aef2703* Aef2704* The following items were excluded from the scaling: Aef2705	I know my child's friends. I tell my child what I think of their friends. I always know which friends my child is with at the time. I talk to my child about things they plan to do with friends. I'm not bothered about whom my child is friends with.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Aef2701*	3,73	,54	,47								
Aef2702*	3,48	,77	,36								
Aef2703*	3,67	,62	,47								
Aef2704*	3,65	,63	,49								
Cronbach's $\alpha = 0,67$ $\bar{x} = 14,54$ SD = 1,8 min = 1, max = 4 N = 3623				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
Aef2705	3,80	,58	,13								
min = 1, max = 4 N = 3595				min = , max = N =				min = , max = N =			

Parents' behaviors promoting Reading (Student Statements)

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskalfvN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Parents' behaviors promoting reading new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	5
Notes:	High values represent a parents' behaviors to promote reading . Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0701, Bsf0703 – Bsf0706
Variable label:	Bsf0701* Bsf0703* Bsf0704* Bsf0705* Bsf0706* The following items were excluded from the scaling: Bsf0702*	How often - do your parents read books? How often - do your parents read magazines? How often - do your parents talk to you about what they have read? How often - do your parents buy or give you books? How often - do your parents go to the library with you? How often - do your parents read newspapers?

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf0701*	3,17	,91	,31				
				Bsf0703*	2,70	1,08	,30				
				Bsf0704*	2,23	1,08	,46				
				Bsf0705*	2,22	,91	,47				
				Bsf0706*	1,90	,97	,39				
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0,63 \bar{x} = 12,22 SD = 3,14 min = 1, max = 4 N = 3917				Cronbach's α = \bar{x} = SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf0702*	3,20	1,05	,27				
min = , max = N =				min = 1, max = 4 N = 3888				min = , max = N =			

Encouragement to Read (Student Statements)

Variable name: ELEMENT 4:
 ELEMENT 5: Bsf1401
 ELEMENT 6: Csf0601

Variable label: ELEMENT 4:
 ELEMENT 5: When you're bored, do your parents suggest you read a book?
 ELEMENT 6: When you're bored, do your parents suggest you read a book?

Data source: Student questionnaire

Notes:

Coding: Value Value label
 1 Always or almost always
 2 Sometimes
 3 Rarely
 4 Never

Item Analysis

Variable	1	2	3	4	5	N
Bsf1401	38,1	41,6	12,6	7,7	0	4109
Csf0601	7,6	10,7	27,4	33,5	20,8	3986

2.3.2.3 Extra Tuition

Remedial Lessons and Extra Tuition within the School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2401 – Aef2406
Variable label:	Aef2401 Aef2402 Aef2403 Aef2404 Aef2405 Aef2406	Extra tuition within the school - further courses for high-achieving students Extra tuition within the school - special tuition/supplementary course in German Extra tuition within the school - special tuition/supplementary course in mathematics Extra tuition within the school - special tuition/supplementary course in other subjects Extra tuition within the school - course for improving learning or working techniques Extra tuition within the school - special tuition for dyslexic children/children with spelling difficulties
Data source:	Parent questionnaire	
Coding:	Value 0 1 2	Value label No, never Yes, sometimes Yes, regularly

Item Analysis

Variable	0	1	2	N
Aef2401	91,63	5,59	2,78	3809
Aef2402	78,91	10,50	10,58	3808
Aef2403	82,02	10,51	7,46	3805
Aef2404	98,08	1,08	0,84	3809
Aef2405	97,92	1,31	0,76	3809
Aef2406	97,87	0,97	1,16	3809

Remedial Lessons and Extra Tuition outside School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2301 – Aef2305
Variable label:	Aef2301 Aef2302 Aef2303 Aef2304 Aef2305	Extra tuition outside school - further courses for high-achieving students Extra tuition outside school - special tuition/supplementary course in German Extra tuition outside school - special tuition/supplementary course in mathematics Extra tuition outside school - special tuition/supplementary course in other subjects Extra tuition outside school - course for improving learning or working techniques
Data source:	Parent questionnaire	
Coding:	Value 0 1 2	Value label No, never Yes, sometimes Yes, regularly

Item Analysis

Variable	0	1	2	N
Aef2301	93,67	3,94	2,39	3807
Aef2302	91,09	4,57	4,34	3806
Aef2303	92,88	4,28	2,84	3807
Aef2304	98,08	1,16	0,76	3809
Aef2305	96,72	2,02	1,26	3807

Native-Language Tuition

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2501, Aef2502
Variable label:	Aef2501 Aef2502	Native-language tuition in a language other than German - in school Native-language tuition in a language other than German - outside school
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef2501	87,34	12,66	3807
Aef2502	94,41	5,59	3807

German as a Foreign Language (DaF)/Second Language (DaZ) - Tuition

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Aef2601, Aef2602
Variable label:	Aef2601 Aef2602	Teaching in German as a foreign language/second language in school Teaching in German as a foreign language/second language outside school
Data source:	Parent questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Aef2601	92,99	7,01	3809
Aef2602	98,45	1,55	3809

3 School

3.1 Learning Environment in School

3.1.1 Student-Teacher Relationship

Positive Relationship with Teacher Mathematics

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskavmN CskavmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	<i>Positive Relationship with Teacher: mathematics E5 new</i> <i>Positive Relationship with Teacher mathematics E6 new</i>
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 6 5
Notes:	High values represent a positive relationship with the mathematics teacher. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf2401 – Bsf2404, Bsf2406, Bsf2407 Csf1107, Csf1112 – Csf1114, Csf1118
Variable label:	Bsf2401* Bsf2402* Bsf2403* Bsf2404* Bsf2406* Bsf2407* Csf1107 Csf1112* Csf1113 Csf1114* Csf1118* The following items were excluded from the scaling: Bsf2405	Maths lessons: if we're not happy about something, we can talk to our teacher about it openly. Maths lessons: our teacher takes our problems seriously. Maths lessons: our teacher can assert themselves in our class. Maths lessons: our teacher tries to respond to what we want. Maths lessons: our teacher pays attention to every single student. Maths lessons: when we make good suggestions, we can have an influence on the teaching. Maths teacher thinks we are hopeless cases Maths teacher tries to respond to what we want. Maths teacher favours some students during teaching Maths teacher pays attention to every single student. Maths teacher can adapt well to our class. Maths lessons: our teacher favours some students during teaching

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2401*	2,99	,96	,63	Csf1107	3,39	,92	,42
				Bsf2402*	3,25	,87	,72	Csf1112*	2,96	,91	,53
				Bsf2403*	3,43	,80	,43	Csf1113	2,63	1,05	,37
				Bsf2404*	3,14	,89	,69	Csf1114*	2,95	,93	,56
				Bsf2406*	3,09	,92	,66	Csf1118*	3,24	,85	,55
				Bsf2407*	2,75	,99	,47				
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0,83 \bar{x} = 18,66 SD = 3,97 min = 1, max = 4 N = 3687				Cronbach's α = 0,73 \bar{x} = 15,17 SD = 3,22 min = 1, max = 4 N = 3738			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}	Variable	\bar{x}	SD	r _{it}
				Bsf2405	2,48	1,03	,03				
min = , max = N =				min = 1, max = 4 N = 3658				min = , max = N =			

Positive Relationship with Teacher: German

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	BskavdN CskavdN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Positive Relationship with Teacher German E5 new Positive Relationship with Teacher German E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 6 5
Notes:	High values represent a positive relationship with the German teacher. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 Bsf2701 – Bsf2704, Bsf2706, Bsf2707 Csf1407, Csf1412 – Csf1414, Csf1418
Variable label:	Bsf2701* Bsf2702* Bsf2703* Bsf2704* Bsf2706* Bsf2707* Csf1407 Csf1412* Csf1413 Csf1414* Csf1418* The following items were excluded from the scaling: Bsf2705	German lessons: if we're not happy about something, we can talk to our teacher about it openly. German lessons: our teacher takes our problems seriously. German lessons: our teacher can assert themselves in our class. German lessons: our teacher tries to respond to what we want. German lessons: our teacher pays attention to every single student. German lessons: when we make good suggestions, we can have an influence on the teaching. German teacher thinks we are hopeless cases German teacher tries to respond to what we want. German teacher favours some students during teaching. German teacher pays attention to every single student. German teacher can adapt well to our class. German lessons: our teacher favours some students during teaching

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
				Bsf2701*	3,13	,91	,65	Csf1407	3,30	,95	,40
				Bsf2702*	3,32	,84	,75	Csf1412*	3,03	,92	,57

				Bsf2703*	3,46	,79	,52	Csf1413	2,56	1,08	,32
				Bsf2704*	3,19	,88	,72	Csf1414*	2,90	,95	,55
				Bsf2706*	3,08	,93	,67	Csf1418*	3,25	,88	,58
				Bsf2707*	2,84	1,02	,53				
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0,85 \bar{x} = 19,02 SD = 4,08 min = 1, max = 4 N = 3414				Cronbach's α = 0.72 \bar{x} = 15,04 SD = 3,23 min = 1, max = 4 N = 3702			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
				Bsf2705	2,45	1,09	-,03				
min = , max = N =				min = 1, max = 4 N = 3393				min = , max = N =			

3.1.2 Evaluation of Teacher's Work

Teaching Quality of Mathematics Teacher

Scale name:	ELEMENT 4:	AskalqmN
	ELEMENT 5:	BskalqmN
	ELEMENT 6:	CskalqmN
Scale label:	ELEMENT 4:	Teaching quality of mathematics teacher E4 new
	ELEMENT 5:	Teaching quality of mathematics teacher E5 new
	ELEMENT 6:	Teaching quality of mathematics teacher E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4:	6
	ELEMENT 5:	18
	ELEMENT 6:	14
Notes:	High values represent a positive evaluation of the mathematics teacher's work. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Asf2603, Asf2604, Asf2703, Asf2704, Asf2804 – Asf2806	Bsf2501 – Bsf2520, Csf1101 – Csf1106, Csf1108 – Csf1111, Csf1115 – Csf1117, Csf1119, Csf1120
	Value Value label	Value Value label
	1 Strongly agree	1 Fully agree
	2 Partly agree	2 Partly agree
	3 Partly disagree	3 Partly disagree
	4 Fully disagree	4 Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4:	Asf2603, Asf2604, Asf2703, Asf2704, Asf2804, Asf2805
	ELEMENT 5:	Bsf2501 – Bsf2518
	ELEMENT 6:	Csf1101 – Csf1106, Csf1108 – Csf1111, Csf1115 – Csf1117, Csf1120
Variable label:	Asf2603*	Our maths teacher - speaks loudly and clearly so that you can easily understand him/ her.
	Asf2604*	Our maths teacher - speaks clearly and intelligibly.
	Asf2703	Maths lessons: too much material is repeated, so we move on very slowly.
	Asf2704	Maths lessons: our teacher moves through the material so slowly that it's boring.
	Asf2804*	Maths lessons: our teacher chooses very interesting topics.
	Asf2805*	Maths lessons: we always know exactly what we have to do.
	Bsf2501*	Our maths teacher - speaks clearly and intelligibly.
	Bsf2502*	Our maths teacher - says what we will be covering at the start of the lesson.
	Bsf2503*	Our maths teacher - takes the time to explain things to individual students who haven't understood them.
	Bsf2504*	Our maths teacher - makes an effort to ensure that everyone keeps up.
	Bsf2505*	Our maths teacher - knows how to get the students really interested in the material.
	Bsf2506*	Our maths teacher - explains the material again and again until everyone has correctly understood it.
	Bsf2507*	Our maths teacher - steps in immediately if we become restless.

Bsf2508*	Our maths teacher - keeps a close eye to ensure that we pay attention.
Bsf2509*	Our maths teacher - can adapt well to our class.
Bsf2510*	Our maths teacher - gives individual students tips on how to learn better.
Bsf2511*	Our maths teacher - also praises the weak students when he sees them improving.
Bsf2512*	Our maths teacher - realises when the lessons are too hard.
Bsf2513	Our maths teacher - moves on with the teaching, even if no-one can keep up.
Bsf2514*	Our maths teacher - summarises the material so that we can all easily remember it.
Bsf2515*	Our maths teacher - knows the strengths and weakness of individual students.
Bsf2516*	Our maths teacher - gives students tasks of varying difficulty, depending on how good they are.
Bsf2517*	Our maths teacher - marks our homework.
Bsf2518*	Our maths teacher - discusses our homework with us.
Csf1101*	Maths teacher was satisfied with me.
Csf1102*	Maths teacher assessed me fairly.
Csf1103*	Maths teacher gave me the help I needed.
Csf1104*	Maths teacher explain teaching material very well.
Csf1105	Maths teacher provided too few examples.
Csf1106	Maths teacher rarely responded to our questions.
Csf1108*	Maths teacher took enough time out for me.
Csf1109*	Maths teacher designed the teaching in a varied way.
Csf1110	Maths teacher repeated important things far too rarely.
Csf1111*	Maths teacher makes sure that we keep our books and folders in good order.
Csf1115*	Our maths teacher takes the time to explain things to individual students who haven't understood them.
Csf1116*	Our maths teacher makes an effort to ensure that everyone keeps up.
Csf1117*	Our maths teacher keeps a close eye to ensure that we pay attention.
Csf1120*	Our maths teacher knows how to get us really interested in the material.
The following items were excluded from the scaling:	
Asf2806*	Maths lessons: our teacher steps in immediately if somebody starts becoming disruptive.
Bsf2519	Our maths teacher - repeats too much material, so we move on very slowly.
Bsf2520	Our maths teacher - moves through the material so slowly that it's boring.
Csf1119*	Maths teacher gives students tasks of varying difficulty, depending on how good they are.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf2603*	3,80	,50	,39	Bsf2501*	3,38	,78	,64	Csf1101*	3,16	,75	,39
Asf2604*	3,70	,59	,40	Bsf2502*	3,07	,96	,50	Csf1102*	3,42	,79	,54
Asf2703	2,95	1,01	,37	Bsf2503*	3,32	,87	,67	Csf1103*	3,24	,91	,64
Asf2704	3,17	1,00	,44	Bsf2504*	3,46	,80	,74	Csf1104*	3,29	,89	,72
Asf2804*	3,40	,78	,37	Bsf2505*	2,88	,92	,64	Csf1105	3,03	,94	,43
Asf2805*	3,42	,73	,36	Bsf2506*	3,12	,92	,66	Csf1106	3,20	,94	,47
				Bsf2507*	3,43	,77	,41	Csf1108*	2,86	,97	,61
				Bsf2508*	3,51	,71	,57	Csf1109*	3,07	,95	,63
				Bsf2509*	3,34	,82	,71	Csf1110	2,93	,98	,44
				Bsf2510*	3,17	,92	,69	Csf1111*	2,98	1,02	,35
				Bsf2511*	3,49	,78	,66	Csf1115*	3,30	,88	,64
				Bsf2512*	2,94	,92	,64	Csf1116*	3,38	,83	,71
				Bsf2513	2,80	1,05	,11	Csf1117*	3,51	,73	,47
				Bsf2514*	3,35	,82	,67	Csf1120*	2,61	,97	,58
				Bsf2515*	3,25	,84	,62				
				Bsf2516*	2,53	1,09	,35				
				Bsf2517*	3,53	,76	,44				
				Bsf2518*	3,56	,74	,53				
Cronbach's $\alpha = 0,67$ $\bar{x} = 20,44$ SD = 2,84 min = 1, max = 4 N = 3532				Cronbach's $\alpha = 0,91$ $\bar{x} = 58,11$ SD = 4,08 min = 1, max = 4 N = 3375				Cronbach's $\alpha = 0.72$ $\bar{x} = 15,04$ SD = 3,23 min = 1, max = 4 N = 3702			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf2806*	3,38	,83	,18	Bsf2519	2,80	1,03	,07	Csf1119*	2,44	1,12	,20
				Bsf2520	3,02	1,04	,10				

min = 1, max = 4 N = 3510	min = 1, max = 4 N = 3356	min = 1, max = 4 N = 3610
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Teaching Quality of German Teacher

Scale name:	ELEMENT 4:	AskalqdN
	ELEMENT 5:	BskalqdN
	ELEMENT 6:	CskalqdN
Scale label:	ELEMENT 4:	Teaching quality of German teacher E4 new
	ELEMENT 5:	Teaching quality of German teacher E5 new
	ELEMENT 6:	Teaching quality of German teacher E6 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4:	6
	ELEMENT 5:	17
	ELEMENT 6:	14
Notes:	High values represent a positive evaluation of the German teacher's work. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Asf2601, Asf2602, Asf2701, Asf2702, Asf2801 – Asf2803	Bsf2601 – Bsf2620, Csf1401 – Csf1406, Csf1408 – Csf1411, Csf1415 – Csf1417, Csf1419, Csf1420
	Value	Value label
	1	Strongly agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
	Value	Value label
	1	Fully agree
	2	Partly agree
	3	Partly disagree
	4	Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4:	Asf2601, Asf2602, Asf2701, Asf2702, Asf2801, Asf2802
	ELEMENT 5:	Bsf2601 – Bsf2612, Bsf2614 – Bsf2618
	ELEMENT 6:	Csf1401 – Csf1406, Csf1408 – Csf1411, Csf1415 – Csf1417, Csf1420
Variable label:	Asf2601*	Our German teacher - speaks loudly and clearly so that you can easily understand.
	Asf2602*	Our German teacher - speaks clearly and intelligibly.
	Asf2701	German lessons: too much material is repeated, so we move on very slowly.
	Asf2702	German lessons: our teacher moves through the material so slowly that it's boring.
	Asf2801*	German lessons: our teacher chooses very interesting topics.
	Asf2802*	German lessons: we always know exactly what we have to do.
	Bsf2601*	Our German teacher - speaks clearly and intelligibly.
	Bsf2602*	Our German teacher - says what we will be covering at the start of the lesson.
	Bsf2603*	Our German teacher - takes the time to explain things to individual students who haven't understood them.
	Bsf2604*	Our German teacher - makes an effort to ensure that everyone keeps up.
	Bsf2605*	Our German teacher - knows how to get the students really interested in the material.
	Bsf2606*	Our German teacher - explains the material again and again until everyone has correctly understood it.
	Bsf2607*	Our German teacher - steps in immediately if we become restless.
	Bsf2608*	Our German teacher - keeps a close eye to ensure that we pay attention.
	Bsf2609*	Our German teacher - can adapt well to our class.

Bsf2610*	Our German teacher - gives individual students tips on how to learn better.
Bsf2611*	Our German teacher - also praises the weak students when he sees them improving.
Bsf2612*	Our German teacher - realises when the lessons are too hard.
Bsf2614*	Our German teacher - summarises the material so that we can all easily remember it.
Bsf2615*	Our German teacher - knows the strengths and weakness of individual students.
Bsf2616*	Our German teacher - gives students tasks of varying difficulty, depending on how good they are.
Bsf2617*	Our German teacher - marks our homework.
Bsf2618*	Our German teacher - discusses our homework with us.
Csf1401*	German teacher was satisfied with me.
Csf1402*	German teacher assessed me fairly.
Csf1403*	German teacher gave me the help I needed.
Csf1404*	German teacher explain teaching material very well.
Csf1405	German teacher provided too few examples.
Csf1406	German teacher rarely responded to our questions.
Csf1408*	German teacher took enough time out for me.
Csf1409*	German teacher designed the teaching in a varied way.
Csf1410	German teacher repeated important things far too rarely.
Csf1411*	German teacher makes sure that we keep our books and folders in good order.
Csf1415*	German teacher takes the time to explain things to individual students who haven't understood them.
Csf1416*	German teacher makes an effort to ensure that everyone keeps up.
Csf1417*	German teacher keeps a close eye to ensure that we pay attention.
Csf1420*	German teacher knows how to get us really interested in the material.
The following items were excluded from the scaling:	
Asf2803*	German lessons: our teacher steps in immediately if somebody starts becoming disruptive.
Bsf2613	Our German teacher - moves on with the teaching, even if no-one can keep up.
Bsf2619	Our German teacher - repeats too much material, so we move on very slowly.
Bsf2620	Our German teacher - moves through the material so slowly that it's boring.
Csf1419*	German teacher gives students tasks of varying difficulty, depending on how good they are.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf2601*	3,80	,50	,36	Bsf2601*	3,51	,733	,67	Csf1401*	3,18	,74	,47
Asf2602*	3,71	,57	,41	Bsf2602*	3,13	,931	,60	Csf1402*	3,35	,83	,63
Asf2701	2,90	,99	,34	Bsf2603*	3,24	,869	,73	Csf1403*	3,12	,91	,71
Asf2702	3,14	1,00	,42	Bsf2604*	3,42	,791	,75	Csf1404*	3,23	,88	,76
Asf2801*	3,42	,72	,33	Bsf2605*	2,93	,957	,68	Csf1405	2,84	,97	,42

Asf2802*	3,40	,72	,31	Bsf2606*	3,15	,892	,71	Csf1406	2,97	,98	,45
				Bsf2607*	3,44	,794	,46	Csf1408*	2,89	,96	,64
				Bsf2608*	3,50	,735	,59	Csf1409*	3,07	,93	,69
				Bsf2609*	3,38	,823	,73	Csf1410	2,88	,98	,39
				Bsf2610*	3,22	,906	,73	Csf1411*	3,12	,96	,45
				Bsf2611*	3,42	,826	,68	Csf1415*	3,09	,92	,71
				Bsf2612*	3,06	,918	,66	Csf1416*	3,32	,84	,74
				Bsf2614*	3,26	,857	,69	Csf1417*	3,44	,77	,54
				Bsf2615*	3,28	,869	,66	Csf1420*	2,64	1,00	,59
				Bsf2616*	2,58	1,102	,42				
				Bsf2617*	3,52	,778	,52				
				Bsf2618*	3,52	,753	,59				
Cronbach's $\alpha = 0,65$ $\bar{x} = 20,37$ SD = 2,70 min = 1, max = 4 N = 3548				Cronbach's $\alpha = 0,93$ $\bar{x} = 55,57$ SD = 9,98 min = 1, max = 4 N = 3290				Cronbach's $\alpha = 0,90$ $\bar{x} = 43,13$ SD = 8,26 min = 1, max = 4 N = 3521			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf2803*	3,37	,80	,16	Bsf2613	2,80	1,062	,07	Csf1419*	2,34	1,01	,18
				Bsf2619	2,82	1,079	,04				
				Bsf2620	2,93	1,090	,16				
min = 1, max = 4 N = 3520				min = 1, max = 4 N = 3239				min = 1, max = 4 N = 3511			

3.1.3 Instruction Quality

Quality of mathematics instruction

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CskaqmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Quality of mathematics instruction new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	8
Notes:	High values represent a high quality of mathematics instruction. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf1301, Csf1302, Csf1304 – Csf1309
Variable label:	Csf1301* Csf1302* Csf1304* Csf1305* Csf1306* Csf1307* Csf1308* Csf1309*	I could follow the maths lessons easily. I usually knew what needed to be learnt in the lessons. Maths teacher said what topic would be covered at the start of the lesson. Maths teacher said how the topic would be covered at the start of the lesson. At the end of the lesson, what had been covered was summarised. Maths homework was marked regularly. We worked quickly in maths lessons. I learnt many new things in mathematics this year.
	The following items were excluded from the scaling:	
	Csf1303	We would have learnt more with greater discipline in class.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
								Csf1301*	3,36	,75	,46
								Csf1302*	3,38	,74	,47
								Csf1304*	3,15	,96	,51
								Csf1305*	2,81	,98	,50
								Csf1306*	2,26	1,03	,33
								Csf1307*	3,53	,76	,40
								Csf1308*	3,17	,79	,41
								Csf1309*	3,48	,74	,51
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0,76 \bar{x} = 25,15 SD = 4,09 min = 1, max = 4 N = 3743			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
								Csf1303	2,29	1,02	-,07
min = , max = N =				min = , max = N =				min = 1, max = 4 N = 3722			

Quality of German instruction

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	CskaqmN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Quality of German instruction new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	8
Notes:	High values represent a high quality of German instruction. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Fully agree Partly agree Partly disagree Fully disagree
Scaling:	Averaging	
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf1601, Csf1602, Csf1604 – Csf1609
Variable label:	Csf1601* Csf1602* Csf1604* Csf1605* Csf1606* Csf1607* Csf1608* Csf1609* The following items were excluded from the scaling: Csf1603	I could follow the German lessons easily. I usually knew what needed to be learnt in the lessons. German teacher said what topic would be covered at the start of the lesson. German teacher said how the topic would be covered at the start of the lesson. At the end of the lesson, what had been covered was summarised. German homework was marked regularly. We worked quickly in German lessons. I learnt many new things in German this year. We would have learnt more with greater discipline in class.

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
								Csf1601*	3,40	,74	,55
								Csf1602*	3,35	,76	,57
								Csf1604*	2,99	1,00	,62
								Csf1605*	2,84	1,00	,61
								Csf1606*	2,38	1,04	,42
								Csf1607*	3,47	,79	,49
								Csf1608*	3,13	,84	,55
								Csf1609*	3,29	,84	,64
Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = \bar{x} = SD = min = , max = N =				Cronbach's α = 0,83 \bar{x} = 24,85 SD = 4,75 min = 1, max = 4 N = 3681			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
								Csf1603	2,31	1,05	-,07
min = , max = N =				min = , max = N =				min = 1, max = 4 N = 3655			

3.1.4 Reading in School

Forms of Reading in School (Student Statements)

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf0801 – Asf0806
Variable label:	Asf0801 Asf0802 Asf0803 Asf0804 Asf0805 Asf0806	At school - my teacher reads something out to the class. At school - I read something out myself to the whole class. At school - I reads something out to a smaller group of students. At school - I read quietly for myself. At school - I read along silently when other students read something out. At school - I read books I pick out myself.
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Asf0801	17,9	35,6	27,2	19,3	3664
Asf0802	10,1	33,2	25,4	31,3	3639
Asf0803	5,8	15,5	21,6	57,2	3639
Asf0804	62,4	25,6	7,1	4,9	3659
Asf0805	51,7	21,7	8,7	17,9	3669
Asf0806	47,7	21,3	12,8	18,2	3683

Activities after Reading at School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf1501 - Bsf1507
Variable label:	Bsf1501	After reading in the lesson - I answer written questions about what has been read.
	Bsf1502	After reading in lessons - I write something about what I've read (for example a summary, a story, or what I thought about what I read).
	Bsf1503	After reading in the lesson - I answer oral questions about what has been read.
	Bsf1504	After reading in the lesson - I talk to other students about what has been read.
	Bsf1505	After reading in the lesson - I do group work with other students on what has been read.
	Bsf1506	After reading in the lesson - I write an essay on what has been read.
	Bsf1507	After reading in the lesson - I act in a play about what has been read.
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf1501	26,3	41,1	17,1	15,5	4062
Bsf1502	9,9	29,3	27,2	33,6	4055
Bsf1503	34,1	37,7	17,7	10,6	4032
Bsf1504	16,3	30,2	22,5	31,1	4048
Bsf1505	7,1	17,8	29,4	45,6	4044
Bsf1506	7,6	18,0	35,4	39,0	4044
Bsf1507	3,7	5,7	13,1	77,5	4058

3.2 Underlying School Environment

School Location – East/West

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Cprbzow
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	District East/West of school location E6
Notes:	Entries on school location: West Berlin or East Berlin districts (by classification valid until 31.12.2000)	
Coding:	Value 0 1	Value label East West

Item Analysis

Variable	0	1	N
Cprbzow	37,3	62,7	4926

4 Leisure Time

4.1 Activities related to School

Doing Homework

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf0104
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you do homework?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Csf0104	93,1	4,5	0,6	1,8	3960

Practicing

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0211
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you practise for school?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0211	41,9	41,6	11,1	5,4	4105

Private Tuition:

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf0501
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you do have private tuition?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	5	N
Csf0501	6,1	11,9	30,1	29,8	22,2	3993

Conversations with Friends and Siblings about School

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0210
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you talk with your friends/brothers and sisters about school?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0210	40,2	33,3	13,3	13,2	4109

4.2 Activities outside School

4.2.1 Informal Leisure Time Activities

Doing Sports

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0105
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you do sport?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0105	47,4	44,0	4,6	4,0	4083

Playing a Musical Instrument

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0112
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you play a musical instrument?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0112	20,4	19,8	9,9	49,9	4092

Playing a Games Console

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf0111
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you play on a games console?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Csf0111	22,6	23,0	15,4	39,0	3967

Listening to Audio Plays or AudioBooks

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Csf0112
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you listen to audio plays/audio books?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Csf0112	16,8	15,7	19,9	47,6	3986

Social Contacts: Frequency and Social Circle

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0104, Bsf0106, Bsf0110
Variable label:	Bsf0104 Bsf0106 Bsf0110	How often - do you do something with friends? How often - do you do something with family? How often - do you play with friends/brothers and sisters?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0104	42,0	44,8	10,4	2,8	4075
Bsf0106	15,2	54,6	25,8	4,4	4061
Bsf0110	63,1	26,7	5,5	4,4	4067

4.2.2 Courses in Leisure Time

Sports Course

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0301 Csf0201
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Do you attend - a sports course? Do you attend - a sports course?
Data source:	Student questionnaire	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Bsf0301	39,0	61,0	4070
Csf0201	36,5	63,5	3947

Music Course

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0302 Csf0202
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 Do you attend - a music course? Do you attend - a music course?
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Bsf0302	68,5	31,5	4043
Csf0202	67,0	33,0	3889

Language Course

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0303 Csf0203
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	 Do you attend - a language course? Do you attend - a language course?
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Bsf0303	83,6	16,4	4011
Csf0203	87,0	13,0	3850

Study Group

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0304 Csf0204
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Do you attend - a study group outside school? Do you attend - a study group outside school?
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Bsf0304	64,9	35,1	4010
Csf0204	73,6	26,4	3848

Private Tuition

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0305 Csf0205
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Do you attend - private tuition courses? Do you attend - private tuition courses?
Data source:	Student questionnaire	
Coding:	Value 0 1	Value label No Yes

Item Analysis

Variable	0	1	N
Bsf0305	83,2	16,7	3974
Csf0205	82,6	17,4	3822

Other Course

Variable name: ELEMENT 4:
 ELEMENT 5: Bsf0306
 ELEMENT 6: Csf0206

Variable label: ELEMENT 4:
 ELEMENT 5: Do you attend - another course?
 ELEMENT 6: Do you attend - another course?

Data source: Student questionnaire

Notes: This variable has an open-response format in the questionnaire. Only the entries yes or no are contained in the data set.

Coding: Value Value label
 0 No
 1 Yes

Item Analysis

Variable	0	1	N
Bsf0306	24,8	75,2	1176
Csf0206	89,6	10,4	4016

4.2.3 Reading

Reading Habits

Scale name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	AskalgN BskalgN
Scale label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Reading habits E4 new Reading habits E5 new
Data source:	Student questionnaire	
Number of items:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	5 5
Notes:	High values represent frequent reading activities. Items whose polarity is to be reversed for scaling are marked with a *.	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never
Scaling:		
Items		
Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf0601 – Asf0605 Bsf0301 – Bsf0304, Bsf0306 – Bsf0308
Variable label:	Asf0601* Asf0602* Asf0603* Asf0604* Asf0605* Bsf0201* Bsf0202* Bsf0203* Bsf0205* Bsf0206* Bsf0207* Bsf0208* The following items were excluded from the scaling: Asf0606* Bsf0204*	Outside school, how often do you - read something out to somebody? Outside school, how often do you - talk to friends about what you have read? Outside school, how often do you - discuss what you have read with your family? Outside school, how often do you - read because you enjoy it? Outside school, how often do you - read to find out about things you would like to learn? How often - do you read something out to somebody? How often - do you talk to friends about what you have read? How often - do you discuss what you have read with your family? How often - do you read with your parents? How often - do you read in German? How often - do you read before going to sleep? How often - do your parents/other persons read something out to you? Outside school, how often do you - read in a language other than German? How often - do you read in a language other than German?

Scale Analysis

ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf0601*	2,33	1,06	,42	Bsf0201*	2,06	,98	,47				
Asf0602*	2,20	1,08	,54	Bsf0202*	1,98	1,02	,51				
Asf0603*	2,59	1,10	,55	Bsf0203*	2,20	1,07	,58				
Asf0604*	3,23	1,03	,43	Bsf0205*	1,55	,89	,38				
Asf0605*	3,12	1,00	,47	Bsf0206*	3,57	,76	,39				
				Bsf0207*	2,98	1,17	,36				
				Bsf0208*	1,43	,79	,33				
Cronbach's $\alpha = 0.72$ $\bar{x} = 13,47$ SD = 3,63 min = 1, max = 4 N = 3757				Cronbach's $\alpha = 0.72$ $\bar{x} = 15,77$ SD = 4.11 min = 1, max = 4 N = 3763				Cronbach's $\alpha =$ $\bar{x} =$ SD = min = , max = N =			
The following items were excluded from the scaling due to insufficient discrimination (< .3):											
ELEMENT 4				ELEMENT 5				ELEMENT 6			
Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}	Variable	\bar{x}	SD	r_{it}
Asf0606*	1,69	1,06	,24	Bsf0204*	1,79	1,08	,23				
min = 1, max = 4 N = 3654				min = 1, max = 4 N = 3733				min = , max = N =			

Reading Habits: Text Type and Situation

Variable name: ELEMENT 4:
 ELEMENT 5:
 ELEMENT 6: Csf0106 – Csf0109

Variable label: Csf0106 How often - do you read non-fiction?
 Csf0107 How often - do you read comics?
 Csf0108 How often - do you read stories?
 Csf0109 How often - do you read before going to sleep?

Data source: Student questionnaire

Notes: Csf0109 also appears in the scales on reading habits in ELEMENT 4 and 5, but in a different context.

Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Csf0106	11,4	31,5	33,9	23,2	3950
Csf0107	15,2	25,8	23,5	35,5	3956
Csf0108	34,3	30,4	20,7	14,6	3949
Csf0109	44,5	21,2	12,4	21,8	3950

Time Spent Reading

Variable name:	ELEMENT 4:	
	ELEMENT 5:	Bsf1201
	ELEMENT 6:	Csf0401
Variable label:	ELEMENT 4:	
	ELEMENT 5:	How long do you normally read for?
	ELEMENT 6:	How long do you normally read for?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Less than half an hour a week
	2	Half an hour to 1 hour a week
	3	1-2 hours a week
	4	More than 2 hours a week

Item Analysis

Variable	1	2	3	4	N
Bsf1201	11,4	23,0	18,6	46,9	4099
Csf0401	12,9	17,6	16,5	53,0	4119

Recent handling of Books

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0801 – Bsf1101
Variable label:	Bsf0801	How many books have you been given/have you bought since the last Christmas holidays?
	Bsf0901	How many books in German have you read since the last Christmas holidays?
	Bsf1001	How many books in another language have you read since the last Christmas holidays?
	Bsf1101	How many books have you borrowed since the last Christmas holidays?

Data source: Student questionnaire

Coding:	Bsf0801, Bsf1101		Bsf0901, Bsf1001	
	Value	Value label	Value	Value label
	1	None	1	None
	2	1-3 books	2	1-5 books
	3	4-6 books	3	5-10 books
	4	7-9 books	4	10-15 books
	5	More than 10 books	5	More than 15 books

Item Analysis

Variable	1	2	3	4	5	N
Bsf0801	12,5	40,9	24,2	8,8	13,5	4113
Bsf0901	7,2	57,5	18,5	7,1	9,7	4109
Bsf1001	66,8	27,7	3,0	1,1	1,3	4112
Bsf1101	37,1	35,2	13,1	4,9	9,7	4118

Book Gifts

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf1301 Cs0501
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Are you given books as gifts on certain occasions? Are you given books as gifts on certain occasions?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Never
	2	Rarely
	3	Sometimes
	4	Often
	5	Always

Item Analysis

Variable	1	2	3	4	5	N
Bsf1301	4,4	12,9	30,9	31,4	20,3	4109
Cs0501	6,1	11,9	30,1	29,8	22,2	3993

Library Use: Frequency and Activities

Variable name: ELEMENT 4: Asf0701 - Asf0706
 ELEMENT 5:
 ELEMENT 6:

Variable label: Asf0701 How often do you go to the library - to borrow books, magazines?
 Asf0702 How often do you go to the library - to borrow comics?
 Asf0703 How often do you go to the library - to borrow audio plays?
 Asf0704 How often do you go to the library - to borrow music?
 Asf0705 How often do you go to the library - to borrow party games?
 Asf0706 How often do you go to the library - to surf the internet?

Data source: Student questionnaire

Coding: Value Value label
 1 Every day or almost every day
 2 Once or twice a week
 3 Once or twice a month
 4 Never or almost never

Item Analysis

Variable	1	2	3	4	N
Asf0701	8,8	18,7	34,9	37,6	3897
Asf0702	7,4	10,9	16,3	65,4	3831
Asf0703	9,6	13,6	22,8	54,0	3862
Asf0704	10,3	12,9	19,4	57,3	3818
Asf0705	6,4	9,6	16,3	67,8	3820
Asf0706	11,6	13,4	16,3	58,7	3843

4.2.4 Writing

Writing Letters, Stories, Diaries

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0209 Csf0110
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	How often - do you write letters, stories, diaries? How often - do you write letters, stories, diaries?
Data source:	Student questionnaire	
Coding:	Value	Value label
	1	Every day or almost every day
	2	Once or twice a week
	3	Once or twice a month
	4	Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0209	28,1	23,2	22,8	25,8	4097
Csf0110	24,1	24,6	23,8	27,6	3950

4.2.5 Use of Computers

Computer Use: Yes/No

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf01501
Variable label:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Do you use a computer?
Data source:	Student questionnaire	
Coding:	Value	Value label
	0	No
	1	Yes

Item Analysis

Variable	0	1	N
Asf01501	56,3	25,3	2772

Computer Use: Location and Frequency

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf01502 – Asf1504
Variable label:	Asf1502 Asf1503 Asf1504	How often do you use the computer - at home? How often do you use the computer - at school? How often do you use the computer - at another location?
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Asf1502	37,9	38,9	14,6	8,6	3204
Asf1503	4,0	13,6	13,0	69,3	3089
Asf1504	10,1	13,2	22,3	54,4	3108

Computer Use: Activities

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Asf01505 – Asf1509 Bsf0101, Bsf0102, Bsf0113, Bsf0114 Csf0101, Csf0102
Variable label:	Asf1505 Asf1506 Asf1507 Asf1508 Asf1509 Bsf0101 Bsf0102 Bsf0113 Bsf0114 Csf0101 Csf0102	When using the computer, how often do you - play games? When using the computer, how often do you - write reports/stories? When using the computer, how often do you - surf the internet? When using the computer, how often do you - read and write e-mails? When using the computer, how often do you - search for information? How often - do you play games on the computer? How often - do you use educational programs? How often - do you read and write e-mails? How often - do you surf the internet? How often - do you play games on the computer? How often - do you use educational programs?
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Asf1505	34,9	40,3	17,6	7,2	3205
Asf1506	15,6	21,2	26,2	36,9	3179
Asf1507	17,4	19,1	19,8	43,6	3170
Asf1508	12,8	11,4	15,0	60,9	3161
Asf1509	17,4	19,1	22,4	41,2	3174
Bsf0101	24,9	42,1	18,6	14,5	4096
Bsf0102	10,5	29,6	22,9	36,9	4049
Bsf0113	10,8	15,5	16,9	56,8	4074
Bsf0114	12,4	21,5	24,5	41,7	4114

Csf0101	26,1	43,0	16,7	14,2	3977
Csf0102	6,4	23,2	23,3	47,1	3954

4.2.6 Television

Television Frequency

Variable name:	ELEMENT 4: ELEMENT 5: ELEMENT 6:	Bsf0103, Bsf0111 Csf0103
Variable label:	Bsf0103 Bsf0111 Csf0103	How often - do you watch TV, videos, DVDs? How often - do you watch TV? (non-German) How often - do you watch TV, videos, DVDs?
Data source:	Student questionnaire	
Coding:	Value 1 2 3 4	Value label Every day or almost every day Once or twice a week Once or twice a month Never or almost never

Item Analysis

Variable	1	2	3	4	N
Bsf0103	65,8	25,8	6,2	2,2	4089
Bsf0111	12,3	11,7	11,9	64,1	4089
Csf0103	71,5	22,8	3,9	1,8	3977

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